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## PRESENTATION

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

Good morning. I'd like to welcome you to MACOM's Analyst Meeting to discuss our strategy to accelerate and broaden breakout growths within Cloud datacenters. I'm Steve Ferranti, Vice President of Investor Relations at MACOM.

Today's presentation is being broadcast live over the internet and will be available for replay via webcast on the Investor Relation Section of MACOM's website. The slides we are presenting today will also be posted to the Investor Relations page.

The format of today's meeting consists of formal presentations from members of the Executive team, followed by a question and answer session. For those in attendance, we ask you please hold any questions until after the presentations.

Before we get started, let me quickly read through the Safe Harbor Statement. This presentation contains forward-looking information related to MACOM, AppliedMicro, and the proposed acquisition of AppliedMicro by MACOM that involves substantial risks and uncertainties that could cause actual results different materially from those expressed and implied by such statements.

Forward-looking statements in this presentation include, among other things, statements about potential benefits and synergies, strategic plans, divestitures, cost saving accretion, revenue, margins, market share capture, competitive position, integration, and financial and business expectations associated with the acquisition, the price of the transaction, the consideration used in the transaction, the anticipated timing of the closing of the acquisition.

A further description of the risks and uncertainties related to MACOM and AppliedMicro can be found in the respective annual reports on 10K for the fiscal years ended September 30, 2016 and March 31, 2016, respectively, and in their subsequent quarterly reports on Form 10Q and current reports on Form 8K, all of which are filed with US Securities and Exchange Commission and available at [www.SEC.gov](http://www.SEC.gov).

We make references in this presentation to certain financial information calculated on a basis other than in accordance with accounting principles generally accepted in the United States, including non-GAAP gross margin and operating margin, non-GAAP earnings per share, non-GAAP revenue, and non-GAAP free cash flow. These non-GAAP measures are provided to enhance the user's overall understanding of the potential impact of the AppliedMicro transaction. We are unable to provide a quantitative reconciliation of these non-GAAP measures to the most directly comparable GAAP measures because we cannot reliably forecast transaction, integration and other costs related to the AppliedMicro transaction, which are difficult to predict and estimate.

With that out of the way, we'll turn it over to John Croteau, President and Chief Executive Officer of MACOM.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Thank you, Steve. So welcome, everyone. We've got about 45 minutes of prepared formal presentation, and then fairly open-ended Q&A, so feel free to stay as long as you want. We'll have some key folks here that can be able to answer a lot of questions about — not just the AppliedMicro transaction, but all aspects of our business.

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Okay, so Safe Harbor. So, what I figured I'd do is put in context what we've been communicating recently in terms of the scope of our existing Optical business to put in context what AppliedMicro does. So as we reported a few weeks ago at our earnings call, a sum total of all our Optical businesses adds up now to more than 50%, 53% of sales.

This is a snapshot and our fourth quarter, continues to grow. Actually, there's other parts of our portfolio that are going to be out-growing optical, as much as 40, 50% for the next year — aerospace, defense and multi-markets and so on. But we're really poised, and I think what you'll see is we're teed up yet another year above performance in the Optical stuff. Last year we grew, nearly doubled year-on-year the Optical business. This is from effectively zero three or four years ago.

So, one of the big drivers was Metro Long Haul business; this is not lasers, this is analog, high performance analog modulator drivers, trans-impedance amplifiers. It's a total of 13% of our total sales for the Company, a 49% sequential growth last quarter, 81% year-on-year, so this has been a fabulous growth driver. We've got at least 16% share across all Long Haul Metro networks, independent of protocols, deployments, regions and so on. There's another 6% of sales that we report Metro Long Haul, that's specifically in the FiBest TOSA/ROSA portfolio. That is not a growth strategy. In the short term, it's an issue of getting gross margins to the point of they don't end up dilutive, but later in the presentation I'll talk about the role that FiBest play in the portfolio.

The other big growth driver over the past few years was driven by our lasers. This is the BinOptics lasers into passive optical networks for access, fiber-to-the-home. That snapshot in the fourth quarter was 14% of total sales inclusive of not just lasers, but laser drivers, transimpedance amplifiers. Those high performance products were previously the Mindspeed part of the portfolio that came in three years ago. That's continued to grow. I think last year that part of the portfolio grew 29%, the analog stuff.

The lasers we quadrupled output over the past two years and doubled revenue within 18 months of the acquisition. So it's a good combination of acquisitions as well as organic growth. The PON market is undergoing a transition in the coming year to 10 gig depending on how quickly that ramps up, and 2 1/2 gig ramps down. We're looking at maybe a flat to slightly down year in terms of the market.

That said, we continue to increase our share in our content and our goal is to actually continue growing that, but it's certainly not going to be the growth driver. We topped out at 70% share lasers. Very difficult to grow share beyond 70%, but we can certainly bundle more analog content, increase parts of our portfolio. That's the goal. This is now from a go forward basis, a great cash flow business. It's a great cash cow. That's not where the growth is going to come from.

About a year or two ago, Preet redirected his HP team in Newport Beach to focus on datacenters. Same technologies as PON, higher speed. You're talking about 25 gig to 100 gig, as much as 400 gig now; modulator drivers, clock data recovery circuits, TIAs. And we came clean last quarter a couple of weeks ago. That's now 8% of sales. We enabled over 1 million ports, so this is off to the races and our customer's are expecting to double port count over the next year.

So the TAM increases by 100%, thereabouts, over the next year. More importantly, we've now rolled out our 25 gig laser portfolio for LAN WDM, CWDM, LR4; all the formats for datacenters, and I'll talk later about how that Etched Facet technology plays a critical role with extensions to silicon photonics, L-PICs.

This is where part of the AppliedMicro portfolio rolls in; this is where the PAM 4 PHY comes in, specifically in a datacenter. So the content today is going to focus on datacenters as the next secular growth driver within our Optical Portfolio. Preet will put things in context with the service provider networks, but the reason why I wanted to start with this is, including by the way, if you do the math, is another 12% of Optical which is other. There's back haul, front haul, video, infrastructure and so on.

But this gives you a good sense. Our Optical business is highly diversified; we're not exposed to any one part of the market, we're not even exposed to just service provider networks. Now we've got Cloud service providers that are driving the CAPEX. So, great business, continues to grow, and a great success story with lots of legs, as you'll get a sense of today.

Here's the reason datacenters is so crucial. You've got, over the past five years, you've got a CAGR of 27% on Cloud service provider investments for infrastructure as compared to 3% on service providers — telecom service providers. So this is where the action is. This is where the growth is. We've taken share, established a great position on the service provider side that will continue to grow. 100 gig deployments, 400 gig deployments. But when we talk about the same technologies applied then to datacenters, Cloud datacenters, enterprise datacenters, it's a big, big, big growth opportunity. That's the reason why we're fixated on that at this time.

So that's my kickoff. To put it in context, we've got three presenters today, four including Bob, who'll sum it all up at the end. Preet will kick it off. Preet runs all of our networks businesses. He'll put in context the existing networks, Optical businesses and how AppliedMicro fits in.

I'm very honored to have Paramesh Gopi here, CEO of AppliedMicro. He'll give you great, compelling description of the history where AppliedMicro has been in the industry and the reason why it's actually a superb insights rate in combination with MACOM.

Vivek Rajgarhia was supposed to be here. He actually got called home to India. He, unfortunately, has a death in the family so he can't be here today. Preet actually convinced me that I'm more than qualified. I guess I impressed him that I could eat the Biryani, so I'm going to stand in for Vivek and do the best I possibly can. And again, Bob will sum it up.

With that, Preet.

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**Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business**

Thank you, John. I'll pick up where John left, and you saw the chart on the CAPEX service provider rates, small CAGR of 50% of the Cloud with the phenomenal and explosive growth. So the way we addressed those two markets and breaking them up for you here is the service provider networks on the left-hand side about \$510 million of TAM available to us, and then you've got the datacenter networks with about \$875 million TAM that we are addressing.

The blue here is where currently we are shipping products, which are MACOM products. The green here is what we add on top with the proposed APM acquisition. And if you notice the Metro Long Haul story where we have preeminent position in the market with our coherent drivers and TIAs. On top of that we're going to add OTN and MACsec where APM has leadership position. In the PAM-4 PHY, there's a small portion that actually plays in the service provider market as well. And the majority of the PAM-4 physical layer is actually in the datacenter. These are the 2019 numbers, just to share with you the kind of growth expected of PAM-4 PHY.

The 2020 number is actually over \$250 million. So it's right at the early stages of being deployed in the period of what we're talking about here. And then the OTN MACsec, which I will talk about again later, which is increasingly deployed in the datacenter-to-datacenter connectivity. So if you have a box, like in Panera, for example, that provides the DCI connection it's MACsec enabled on both points.

The analog components, which is the Mindspeed portfolio that John referred to; you add DML lasers, which again, John talked, were 25 gig and photonics. The bottom line is this proposed acquisition allows us to grow our TAM by 50%. And more importantly, it provides more of a solution for MACOM to our customers, therefore, making MACOM as a very, very strategic supplier for their products.

Let me take up the service provider. Both APM and MACOM teams have had very, very successful product execution over the last three-year examples that I've given you. What that's allowed us to do — I think John already mentioned this — about 1 million ports or 100 gigs — not 1 million datacenter ports — 1 million 100-gig ports have been enabled already at the end of our fiscal year by MACOM products.

If I look at the AppliedMicro side, they shipped over six million ports. And if you look at that kind of applications we're enabling and the customer base that we have, it's absolute leadership in the places we play in.

One comment I should have made here is there's actually multiple OEMs, multiple networking Tier I OEMs that single-source a lot of the APM products. If you look at the datacenter market, again, a bunch of industry firsts — both on the MACOM side and on the APM side. There's zero overlap in any of these products. The teams have executed and have a great track record for product leadership. We expect the datacenter growth this year to be just the beginning. So the market's going to more than double, and given our preeminent share, which we calculate to be over 60%, we're going to grow with that market.

If you look at the APM side, the very, very exciting thing, which we actually demonstrated live at ECOC on Europe just a couple of months ago is the APM/PAM-4 PHY, which enables single lambda 100-gig. And I'll talk more about that later on and why that's so critical. The PAM-4 solution that APM working on is actually, again, single-sourced to the number one trans unit company in the world. It's a very, very impressive product line, enabling a wide of applications and the Who's Who of the customer base between MACOM and APM.

Let's talk about this joint portfolio between APM and MACOM. When you look at 100-gig serial PAM-4 and you look at the space between the switch, where the Ethernet switch, like a tomahawk leaves, and between the fiber, the whole signal chain is now covered with this combined portfolio. It's very important. All the way from the switch to the fiber the complete signal chain can be addressed.

More importantly, with AppliedMicro's PAM-4, we can now process signals that can allow you to put 100 gigabytes on a single lambda — not two lambdas, single lambda. The PAM-4 PHY and then all the components there are MACOM. So the laser driver, the laser going into the fiber under the same side, the PD, the TIA and the PAM-4.

This 4x bitrate improvement per lambda is at least 2X and two generations ahead of competitor solutions that are out there. There's also a manufacturing cost reduction when you do the 100-gig or single lambda. It has to do with lowering the test times, lowering the lens alignment times, and actually increasing the yields, resulting in a net manufacturing cost reduction of 40%. One thing you hear again and again about 100-gig adoption is cost, cost, cost, cost. So this solution, very simple, adds the right cost point.

And last but not the least, when you get down to a single lambda, you're not dealing with multiple lambdas such as four lambdas in a classical 25 CWU application; the field reliability actually goes up quite a bit. So we believe that this portfolio, we have now the ability to not only participate and have leadership position but actually accelerate and drive the market towards the adoption of 100-gig as well as 400-gig. The same PAN-4 PHY that's on the left-hand picture for the 100-gig single lambda, actually is capable of handling 400 gigabits per second. And if you do the instantiations times four or what you have on the left on MACOM's drivers, MACOM's lasers — a very, very important piece here, the silicon photonics — the transmit pick and the receive pick — you now have the ability for a cost-effective, working 400-gig solution in a single transceiver. This will absolutely trigger a faster adoption of not just 100-gig, but also 400-gig.

So as I said, the proof's in the pudding. So at ECOC we showed the single lambda 100-gig. And companies like Cisco who had also gotten a version of this running in their labs — they did all measurements, all the link budgets — it then triggered IEEE to propose the ratification of this 100-gig single lambda solution for standardization. And as you know, when IEEE proposes something for standardization, the adoption immediately kicks in. So this event here that happened, Paramesh, three months ago is a very, very significant milestone for our joint solution to be given the IEEE seal of approval.

The other thing I want to point out is today we are shipping in what's called the NRZ. In the NRZ we have complete solution. We got the CDR, the TIA, the laser driver, the laser silicon photonics. Last but not the least, we also bring in the expertise from our FiBest team, and John will talk about that later.

And again, not to belabor the point, when we got the complete signal chain from switch to fiber, we can optimize the signal chain. We can make sure that it works with the link budgets, improving the customer's time to market, improving the customer's yield. We know can also say we are actually modulation agnostic. As NRZ switches to PAN-4, we got you covered, Mr. Customer. The world's highest best-technology node, SerDes, again at least two generations ahead of closest competition. The PAM-4 PHY and the A2D/D2A APM, the product that APM has, allow us to claim now in modulation agnostic.

When the market is ready for PAM-4 we are there. Currently we're shipping all the NRZ products. This allows us to engage with the customers at a very different level giving us high margin, very sticky bundled solutions. Similarly, on the service provider space we talked earlier about the coherent drivers and TIAs — we now add MACsec and OTN framer and mapper. So this actually expands our share of wallet for the service provided telecom centric line cards as well.

And now to Paramesh.

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### **Paramesh Gopi - AppliedMicro - CEO**

Thank you. Thanks, Preet. I know some of you in the audience. I've seen you on many investor tours. We've very excited to be part of this transaction, and to start where Preet left off, I think when I reflect on what has happened, it's pretty amazing because you now have the ability to have a complete solution set that will pervade the entire industry for all of the leading Optical and Datacenter platforms.

So just to give you a notion of where we, as a connectivity business started, we started off in the service provider space. About 4 1/2 years ago when we had started the whole datacenter movement with the server site and the connectivity site, we had a unique perspective that was given to us our customers. We heard about PAN-4, 4 1/2 years ago from the datacenter guys.

Before it was even talked about by people in the semi-conductor space, we heard about it. And we also were given the explicit guidance to move our service provider portfolio, which consists of industry-leading photo-direct correction algorithms; industry-leading PHY, SerDes to a very deep submicron node to enable the highest density datacenter PHYs for upcoming growth. So this is a Who's Who in terms of platforms, the top. If you look at any industry-leading DWDM or packet optical platform, APM's silicon is sole-sourced. And to go back to what Preet said and what John said, usually we are sitting behind a TIA silicon photonics combination that invariably has MACOM in it.

It's an extremely powerful place to be because almost every single — whether it's an ASR9K- router, whether it's a Cloud express box, or whether it's a VTE/DWDM box — if you were to go and remove the line cards, you will see us being very critical component of that box. Now take that and fast-forward it to the last two years. Well, we've had the inside track to go back and build the most compelling set of IP to drive all of the next generation datacenter 100-gig, 400-gig connectivity pieces. And so, if you look at most of what's going in to the highest ramping datacenter products from the leading netbook equipment vendors, you will see once again us. And it's funny because almost a year and a half ago our team started working on PAM-4 before it even became close to being ratified. So I think the notion of having sole-sourced, sticky IP that is locked into industry-leading platforms is the theme here. And I think with the two of us coming together we see the completeness of the portfolio that a customer can leverage to really drive these platforms.

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I think this was mentioned — I want to spend two minutes because if you ask — if one asks what is the key jewels that make, A, our company and MACOM be a very powerful solution provider to a customer, and why now and why is this so important?

Go back four years ago. As I said, people knew that bandwidth was growing at an inexplicable rate, to a large extent — logarithmic and hyper-exponential. And space and power are the key constraints in a 2-kilowatt rack in a datacenter. So whether you're building servers or switches or connectivity, you want to maximize density within a rack.

In order to do that, the most important thing for you to do is how do you take a physical space that has a connection, increase the speed by an order of magnitude at the same power? The only way to do that is to basically think ahead of taking the key power burning elements. They're not digital elements. These are high performance. I'll go back to what John and I talked about when we first met.

This is the analog device's equivalent of data converters. So you're talking about 6-bit, 8-bit data converters running at 56 gigahertz at less than half a watt. So this is key mixed signal sticky analog components for data converters, for 100 gig 30s, for line drivers, and for interface circuits in the analog domain that we ported. We had all this stuff, we ported two generations ahead of everybody else. Two generations ahead of even Avago to make sure that we would be able to put together a less than 4-watt single-lambda module, and it just so happened that the key optics that we were interfacing to was the MACOM optics.

So really speaking, this level of cutting-edge PHY technology, combined with all of our deep customer engagements, how do you build these PHYs? What process technology trade-offs do we need to make? That's where the server and the ARM stuff really got us a unique view into what we needed to do to move this forward. Fast-forward last year — and this is public information if you listen to our calls — we have been now chartered by two of the largest NEMs in the world to build semi-custom solutions for this market and the coherent market. And believe it or not, a lot of that came because of the work, pioneering work, to demonstrate single and 100 and 400-gig that happened in conjunction with MACOM.

The key here is we bring industry-leading CMOS analog, mix-signal technology to enable the entire optical chain. This is an interesting chart, and there's no words on it for an interesting reason. This chart involves perhaps the most important national security semi-conductor linkage that has happened in the last probably decade. So with the Edward Snowden effect, as we call it over the last four years, there's been a number of breaches that have been detected in the infrastructure of major service providers and major datacenter Cloud operators. And there's no secrets now because Snowden kind of — he divulged where the key breaches are in the 10-gig, 40-gig, 100-gig, and eventual data bit networks. And they all come down to a very fundamental flaw in Ethernet. Ethernet is a non-secure medium at every level.

So what ended up happening about 4 1/2 years ago is the first routers that Cisco shipped with our OTN PHYs. We got a really interesting call one morning and I actually was called by one of the most senior most executives at Cisco and said, "Well, we'd like you to re-spin this particular chip." If you call it, it's the X suite family of products. And the request was to put in a Cisco proprietary cypher technology called MACsec, and Cisco had developed it. They had some of the fundamental building blocks, but they needed a mix signal house like us to come in and put that together because it's a hardware physical layer encryption technology that is directly hooked up to a hardware port. So this is not software, this is hardware. At the time we were kind of quizzically looking at ourselves and asking ourselves, "Do we really want to do this?" because it was a re-spin and it was a whole bunch of work.

Turns out that that has become a pervasive world standard, as of this summer, where every single government, both pan-European, all of the United States and Canada, and now the Asia-Pacific Rim are going to adopt secure Ethernet MACsec, which is known IEEE standard, and we have had both the 10-gig, the 100-gig and now the multi-hundred-gig versions of it shipping.

So much so to the point where the ramps - in fact, I think, for those of you who follow our company, one of the analysts said - they followed our company in the 90s — we had our best quarter last quarter in the last probably seven years on the connectivity side; it was a \$30 million quarter primarily driven by this type of security mapping to a physical hardware PHY in key router platforms and switch platforms.

This is the Snowden effect on this slide. Most importantly, what we are doing is sole-sourced to all of the leading packet optical platforms, all of the leading campus switch platforms, and now more importantly because we are the only guys who are ahead of even Broadcom Avago by almost 12 months to 18 months, and we are now partnered with the bonafide optical full chain. We have the entire share of wallet on that line card secure. And, from our perspective, this is going to be a really, really important growth factor, because it's going to become a de facto requirement; specified by governments, specified by megadatacenter operators even in China.

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So if you really think about it, PMC started to talk about this 3 years ago or 2 1/2 years ago; they never put it in and I think they're pretty much gone - they're off the map. And in PHY is pretty much found on Cortina. So we pretty much have the gull sourced capability to drive this market and we are continuing with our PHY and Optical partnerships to make sure that we secure the entire line card for these pieces of equipment going forward.

So, if you really look at this, we're talking about a pretty big CAGR, almost a doubling between 20 and 21 of these, and these include 100-gig, 40-gig, and 400-gig ports, all secured by MACsec. So go to any leading router platform in the world, go to any leading data medium optical platform in the world, rip open the card, and chances are, greater than 70% probability that you'll see an APM chip in front of MACOM Optics.

On the compute business; this is a business in investment mode. One of the things that we want to make sure is that through the divestiture process we continue to support all of the key product lines to the key TIA-1 customers, many of them are linked to our optical business. We are fully in support of making sure that the post-closing divestiture happens appropriately and to the tune of the right value relative to making sure that we can take this business and it's an investment for — an investment, and we'll find the right home for it. Most importantly, we're very excited because in December we'll get back our third generation 450 to 500 spec end ARM processor, which is really important because it once and for all makes sure that the customers that we have commitments to both on the datacenter side and on the optical side are kept appropriately aligned as we divest this business under MACOM.

For those of you — this is a huge market. From a server perspective, it's about a 20 billion market. So if you really look at where we've succeeded so far, HP is shipping their leading storage platform with this. There's a press release associated with it. And a key megadatacenter operator in the Asian Pacific Rim has already started small production shipments of this particular device — of this particular family.

Our view is this small share here becomes a very large mover for whoever gets this business. So from our perspective, there's a lot of work that's gone into this business. We feel extremely proud about what we've done. Most importantly, come Q1 you'll have XGENE III and it will for once and for all kind of talk about the performance that we have been aiming for, which is the high end of the Xeon E5/E7 class.

Just to give you one more notion on that front; it will be the first ever ARM processor that will have terabyte support in one socket at 500 spec at less than 120 watts, which is a very major achievement for guys like us in this space. So we fully intend to work with John and his team to find the appropriate home for this particular business, which is an for us.

All right, John.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Great. Thank you. So what I wanted to speak to you is while the product position in PAM-4 and MACsec is thrilling, absolutely thrilling, hopefully you get a sense from both Preet and Paramesh exactly how exciting that is.

The number one thing that really excited me when we began engaging with Paramesh and team is actually their market position; they have architectural partnerships with many of the major Cloud as well as enterprise datacenter guys. And this is where we are not; we have those relationships on the service provider side, but not yet on the datacenter side. So the combination that presents a very, very powerful revenue synergy. If you look at the PAM04 opportunity in 2019, it looks fairly modest. As, I think, Preet or Paramesh pointed out, that's a very steep curve, that's over 100% year-on-year in that time frame. But the more important thing is day one, those relationships, those engagements, allow us to maximize our penetration today on NRZ in advance of PAM-4 with the analog and photonic content laser content. That's immediate impact today, deeper penetration.

We've done a great job with the analog content so far, we're rolling out the lasers, and what I'll talk about is the photonic stuff as well. So the acceleration of a high-growth market with the ability to maximize — and everything we do, we aspire to gain preeminent shares — 60%, 70%, 80% share. And that's the game plan here, and we're well on our way to do that.

Here's the challenge, though. First generation of 100-gig optical transceiver selling at datacenters are repurposed telecom transceivers. Telecom transceivers are optimized for decades in the field, reliability is paramount, performance is paramount. Whereas on the datacenter it's a three-year life, it's 100-gig optical Ethernet, effectively. So to be able to get that into the datacenter, you need to drive, as Paramesh said, the density, we call it bandwidth density on the racks with a very definitive power constraint. So you basically have to improve density by a factor of four, you have to cut power consumption by a factor of eight, and this is fundamentally analog challenge.

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Whether it's in the PHY using 16-nanometer technology or in the lasers or in the silicon photonics in the laser drivers, the TIAs, CDRs and so on — very challenging power problem. That's what makes it a high-performance market opportunity. Costs have to dramatically change in a holistic look at cost structure, not just squeezing price on existing technology. You need to innovate to be able to attack the cost structure. That's what I'll talk about next.

So this is the game we're in and we're leading it and we're delivering results. So one of the golden nuggets and the cores of our leverage and success — and this is very well understood by the Cloud service providers at this point, is our laser technology that we acquired with BinOptics gives us very profound economic advantages to attack datacenters. And let me put it in context. The traditional way to build a laser is a mechanical cleaving technique — cleave facets. Ours is a wafer skill manufacturing technique; we're operating at four inches. Competitors work at two inches. The yields are profoundly different, we have integer multiples that are cost structured.

What does it mean? We went from 0% to 70% market share in passive optical networks; singularly the most brutal cost sensitive market known to man — 70% share and our gross margin in that business are highly accretive to our corporate results. The economic advantages of this technology are nothing short of stunning. That technology extended to 25 gig lasers is exactly what we announced and datacenters is the next big cost sensitive market, so this is a huge lever point for us on the analog photonic side on a go forward basis.

The second step in that was something that we talked about at our analyst day, which we call it LPEC. Since our lasers are lithographically formed and a silicon photonics chip is lithographically formed, we invented a flipchip technique where you can basically align your lasers automatically, we call it self-aligning AFT, SAFETY for short, and we have our Quad LPE CWDM LPEC that is sampling right now, we have wafers in line that should achieve qualification, and we think by the time OFC comes in March we hope to begin production possibly with leage (sic) — lead large manufacturing costumers with us. So we're that close with all the stuff. This is transformative in terms of cost structure, right, and performance.

The second thing is this Quad LPEC is the exact same front end that Preet showed in his chart with the PAM-4 PHY that delivered 400-gig connectivity. So you can see the leverage on a single chip LPEC; we have quad laser drivers TIAs in our analog portfolio, and now we've got the PHY. So our ability is not just to deliver 100-gig PAM-4, it's 400-gig PAM-4. It's a big, big deal; now we lead the industry in cost structure and performance.

So when you look at it, as Preet said, we've got 100% of the content in the transceiver. Now let me put the icing on the cake here and talk about FiBest. Subtle point, the reason why we acquired FiBest, the TOSA/ROSA company, is they have all the knowledge and know-how about manufacturing cost. So whether we ship an optical subassembly TOSA/ROSA is really a detail. The real issue is our solutions are now optimized for manufacturing costs. We hand our TOSA/ROSA designs to our customers. Those who wish to manufacture themselves, do so. Those who wish to buy from us, do so. But it's we complete the solution, attack the manufacturing cost, everything switched to fiber, including the lens alignment to subtlety profoundly important.

The reason is — there's a chart that we had at our analyst day — if you had to take a repurposed telecom transceiver, you can't hit the price points. If you're going to attack the price points you need 100-gig and datacenter, you have to attack not just the build and material cost, but the package and assembly cost.

That's exactly what these LPECs are doing and that's exactly what the TOSA/ROSA, the lens alignment stuff — what I'm talking about. So we have the holistic approach, we're the leaders in driving cost structure for 100-gig and 400-gig. From a cost structure power envelope standpoint at the datacenters, second to none. And it's now universally understood by the Cloud service provider guys that we're exactly in that position.

I think this is my last slide, but [for] subtlety, but a very important point. We do not, we will not ship the transceiver module. If you just look physically, we sell chips, components, some cases BERDI, sometimes integrated TOSAs and ROSAs, and these are all high margin. These are all accretive, some cases highly accretive to our corporate current gross margins. Just physically look at this. The assembly of that module has a whole bunch of costs, zero value add. We leave it to our customers over in Asia who then supply the transceiver module to the Cloud service guys.

So, it's a subtlety but profoundly important from a corporate strategy standpoint. And the last point I'll make is, while we have all the content switched to fiber, we're not leveraging and bundling things to the point where customers can't add their own value. We are an arms dealer, we sell components to anybody and everyone if they have own secret sauce, their own lasers, their own drivers, their own PHYs. We sell all components. At the end of the day, we're a high performance, analog mixed signal, semi-connector component vendor to the optical space.

Why is that important? Well, you basically enable what is today a very highly fragmented market. And one of the mistakes people make is if they drive an integration strategy, they basically narrow their customers and that's where you end up exposed to the cycles in the optical market. So the goal here is to remain highly diversified, service the entire market, all channels, all customers, soup to nuts.

With that, I'll hand it over to Bob to close.



**Robert McMullan - MACOM Technology Solutions Holdings, Inc. - SVP, CFO**

Thanks, John. Good morning, everyone. Steve? You gave that Safe Harbor with all those disclosures that I'm not going to make, so I don't mean to disappoint everybody, but it's going to be pretty straightforward here.

Let me talk about the transaction itself. It's a stock and cash deal. It's \$8.36 per share for every share of AMCC. The cash is fixed at \$3.25 per share. The stock amount is also fixed at 0.1089 MTSI share per AMCC share. \$290 million will be spent in cash that's on our balance sheet today. Our stock ownership by the AMCC shareholders will be about approximately 15%. The target closing date is in the first calendar quarter, and that would be our second fiscal quarter. And, in summary, the acquisition is accretive on a Non-GAAP basis, that's for gross margins. It's accretive to operating margins. And it's accretive to EPS with one edge and that's in the partial quarter. There can be some uniqueness of the timing of the close that disrupts the normal quarterly relationship of revenues and expenses, so that's sort of a — that's one edge. After that full quarter basis, this is a very, very accretive transaction.

I want to talk about a hard day integration planning process. Now, we've done this a number of times as many of you know. We've made a number of acquisitions here over the last three years, but this is really critical and really does manifest itself into the high performance that we've delivered. First of all, the objective of this integration planning is full disclosure. We lose no revenue. We lose no customer. We want to keep all employees, and for those employees that we will not keep where there's overlaps, we will integrate a best athlete evaluation. It doesn't matter what heritage you come from; we're looking to continue to upgrade the talent of the Company, whether it's existing or a newly acquired individual. And those who do not stay, we treat fairly.

All stakeholders know from Plan Day One, essentially eliminating apprehension and confusion of where they will, where their opportunities are, so they'll be no surprises there, by the time we get to the 100-day point. Importantly, the ownership of the 100-day plan and the integration activities related to it are by MACOM's functional executives. So I have full responsibility of the integration of finance and some of the administration side. And I'm fully accountable. So nobody outside of the working relationships have any input to the organization, and we work very closely with our counterparts to ensure that we understand and on both sides of this planning process and eventually implementation, there's no surprises.

The outcome, though, is very important. This planning process, we found, has eliminated confusion. It treats employees with respect. And success really is a outcome that is part of that communication process. And what it usually delivers, we found, is upside to our anticipated synergies. So this is a proven process. We're going to put it in place that starts essentially at the point of initial due diligence, to start thinking of how we take this company and integrate it into our organization. In the end here, this business becomes essentially another product line of MACOM rather than a company that has been in the place utilizing the capabilities across our operating and administration and manufacturing platforms.

As I said, that planning process yields results, and as you can see over the last three years on a compounded revenue growth basis, we've delivered 32%. Gross margins have expanded almost 1,000 basis points, but exactly 970 Basis Points, and importantly from a shareholder's perspective, EPS has grown on a Non-GAAP basis 47%. We continue to deliver and the ability to integrate these businesses seamlessly and deliver on our commitments to investors and shareholders, delivering neutral to accretive transactions in the first year post-acquisition.

The balance sheet? We have the funding in place to close the transaction. And the only estimate I'm making here today is post-close; we will have approximately \$100 million dollars in cash on the balance sheet and still have access to a \$130 million dollar line of credit. Importantly, the acquisition is in line with our target operating model. We stand committed to delivering revenues of at least 20% growth annually. Our Non-GAAP gross margins are, at a minimum, 60%. As we talked about in our Analyst's Day, we targeted 30%; we're getting closer by the quarter to that 30% operating margin. But because of the concentration of some of these products and past investments and concentration of customers, that some of these new product lines that are evolving today, particularly in the case of some of the datacenter products, they deliver a much higher contribution that will bring us closer to actually over 30%, eventually to 40%.

We are a growing business and we invest in this business, so our free cash flow is targeted to be 60% of our Non-GAAP net income. And that assumption includes 30% operating margin and the reinvestment into our business of about 5% for capital expenditures. With that, I point to the reconciliation of GAAP to Non-GAAP.

With that, we appreciate your attendance today. I'll ask John to come up and we'll take your questions now. Thanks, everybody.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

So that concludes the formal presentation. As I said, we have a fairly open-ended schedule here today, so we're open to questions.

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## QUESTION AND ANSWER

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### Unidentified Audience Member

John, so I think in one of the presentations, I think maybe it was Preet that mentioned that MACOM and AMCC, very close to — or maybe it's ratified already. (Inaudible - microphone inaccessible). Where is your closest competitor? Who is that and how far ahead are you in that? And then, let's just say that, to get that ratification and actual standard is controlled. What does that change, how does that change for any of the competitive dynamic? Do you expect a [final act] once the standard is ratified?

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### John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO

So for the purpose of the webcast I'll repeat the question. So the question is, who's the closest competitor? What's the competitive landscape in the PAM-4 space and how we expect the kind of the market dynamics to change through the ratification process?

Preet? Paramesh.

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### Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business

So there's a couple of ways to think about it, and I think I'll pick on one of the dimensions that Paramesh spent quite a bit of time. When you look at the PAM-4 PHY, there is a significant technology that sits outside of the DSP core, and that technology has to do with the SerDes and the A2D and the D2A. And that technology, for those of you who are familiar with, for example, the Catalina line at ADI, it's all about gigasamples at the right power level. So your technology, Paramesh, is 56 gigasamples per second at half a watt power.

Now, foundational to that achievement, is the process known 16-nanometer. So one way I can tell you is - I'll make the claim and tell you why I make the claim, because we are two generations ahead. The closest competitor has this exact IP in 28 nanometer. After 28, came 20. After 20, came 16, 16 is going to 7. The DSP core itself is relevant, but where I would like you to focus on is moving the IP, which is the analog mixed signal IP, from one process node to another is a Herculean task. It's not a port. It's a redesign. So Paramesh, 2 years, 2 1/2 years, 3 years? How long does it take the port?

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### Paramesh Gopi - AppliedMicro - CEO

I think there's a simple way to look at this is that, we started our 16-nanometer work almost 3 1/2 years ago when we did all the ARM stuff, and this was started in parallel. The most important thing also to mention to Preet's earlier point is nobody has an A2D except in a coherent space today, and that's two process nodes behind it. And way, way out of spec for this particular market.

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### Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business

So to name names, clarify the 28-nanometer, PHY is a 28-nanometer. (Inaudible). I'll make one additional point because John touched on that quite a bit. Historically, MACOM has done a very good job of selling to the transceiver manufacturer. When it came to PAM-4, there's a very, very strict budget from where the signal leaves the internet switch and has to be put onto the fiber on the transferred path. And the received path, grabbing a noisy signal that came to the PD, the portal detector, and turning into a low noise signal and giving it back to the Ethernet switch. That linkage is a system level architectural thinking. Without the partnership, off a Tier 1 systems provider, it's very hard to accomplish those length budgets. So the partnership that Paramesh has - I don't know what's public, what's not public, is with a Tier 1 - one of the largest transceiver shipment OEMs - is fundamental and key to the success. To the best of our knowledge, our competitors do not have that architectural linkage with a substantial Tier 1.

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### Unidentified Audience Member

How about the market behavior for adoption?

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### Paramesh Gopi - AppliedMicro - CEO

The fact of the matter is the adoption starts when IEEE, what's called, proposes a working group to standardize a particular standard. And to give credit in the WiFi space if you guys had followed Broadcom, the WiFi chips are available at Best Buy much sooner than IEEE verified. Or the New Hampshire Interoperability Lab had a test harness. We expect the same behavior and we are seeing the same behavior in this space where our customers want to be first to market, our customers want to be first to market, but their transceiver that has all the attributes associated with a 100-gig single lambda. The actual ratification is almost never paid attention to.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - AppliedMicro - CEO**

So the question is, with some of the Cloud service providers increasingly showing a willingness to participate in the semiconductor ecosystem, how did that impact us?

So I am not at liberty to publically tell you who it is. But I'll give you two examples. One of the largest Cloud service providers already works with us to specify and then validate what we create. Transceivers are going to be a high volume, very high volume, and I think John rightly used the pond analogy both in terms of the volume and the cost structure and the price. The amount of volume that we can generate by creating a solution that everybody in that ecosystem can use drives volume, drives scale, drives the cost down.

In the PAM-4 case, you have something very similar again. You have a systems vendor who will not invest in the analogue mixed signal because that's not for the faint of heart. You can buy a DSP core off the shelf from SIVA or somebody and write your code and run with it. But like I said, sorry to belabor the point, it's not about the DSP core.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Yes. So I can build on that a little bit. There's a lot of evidence that each one of these Cloud service guys wants a high degree of customization, right, which we support. They specify and we implement it to their standards. There's zero evidence that they have the stomach to go after this high-performance analog mixed signal laser photonic, even the analog stuff and even the PHY. And I'm sure you can expand upon the model with the custom PHYs.

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**Paramesh Gopi - AppliedMicro - CEO**

So I think, go back to look at, you know, we have public — go back and look at our disclosures three quarters ago. It was a year ago last year that we said we received our first 16-nanometer silicon platform with this IP. If you go back and look at our transcripts. We were very categorical.

We said exiting this fiscal year we have two of the largest NEMs co-investing with us to build semi-custom integrated circuits. And that was not because of a DSP. That was because of this fundamental data converter technology, SerDes technology that required customization, from their point of view, from their DSP. So that is the key model that we will continue to drive here because, once again, it's not about building a fragmented DSP market. It's about building the right PHYs and the right mixed signal to go after the entire market.

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

To inject another point, we'll test that model with the sale of the compute business. Now, that's a possibility where, to your theory, that the Cloud service providers may want to be involved in processors.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Yes, I mean, if you look at Apple, smartphone world, they have their own processor teams. So one very clear set of potential buyers are the Cloud service guys for the compute business.

**Unidentified Audience Member**

(Inaudible - microphone inaccessible).

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**Paramesh Gopi - AppliedMicro - CEO**

With respect to expanding the number of semi-custom engagements that we have, the expectation was to have more semi-custom engagements going forward. I think what we said was that, because of the IEEE ratification we expect more of those to come on board.

We're very encouraged not only independently and now with MACOM, I think it makes that a much more real situation for us because now you have not only the key mixed signal components, but some of those customers were actually using their optics. So it actually is going to be very key to accelerating this adoption.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - AppliedMicro - CEO**

Yes. So today there's —

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

Do you want to repeat the —

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**Paramesh Gopi - AppliedMicro - CEO**

Sorry, yes.

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

— for the broadcast.

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**Paramesh Gopi - AppliedMicro - CEO**

This is a follow-up of Harsh's question about MACsec. And there were two pieces that you asked. One was the 12 to 18-month lead and the other thing is the share number that I put out there.

So let me start by saying that if you look at the leading router platforms today, the number one selling router in the world is the ASR9K. You can go look at — this is Info/Reddix, Gartner, whoever. If you look at the line cards that support MACsec, they're all based on APM PHYs. Now if you go back and say, well, what are the next generation of 400-gig line cards coming on from that platform on the actual service provider and the datacenter interconnect side? There's also a very high probability, and I can't give you numbers, but you will see us instantiated there.

Extend that over the next two years now to campus switches, the classes of the Aristas and the Nexus 7-Ks. That's the next wave of MACsec option where, because of our heritage in term of providing high-performance mixed signal, 100-gig, multi-port 40-gig and now 200-gig — which we are the only guys who are shipping today for MACsec.

The only other competitor is Broadcom, who will basically have it later with their switches with next generation of their spin of Tomahawk. We believe that we expect to have a lion's share of the market with the key OEMs over the next 18 months.

**Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business**

So maybe to add some information, so there's APM and there's three other sources where you could buy MACsec. PMC CRM invested in it many moons ago. That product line was acquired, milked, no new investment.

Cortina was acquired at a MACsec product line. No new investment. To the best of our knowledge we haven't seen a product come out of that product line, a new launch of a product, in many, many years. The only other company that's investing in it is Alago. And for whatever reason, maybe you guys know better than I do, APM sockets are in the majority of the highest market share routers, campus switches. And one thing, information I may add — and if I misspoke, please correct me — there's also increasingly a demand for an OTN framer mapper integrated with MACsec.

This is for the optical transport line cards. That level of integration doesn't exist in the industry, only APM has. So OTN framer mapper, initial home, pack it up to connect with boxes, new incarnation, MACsec plus OTN — single share.

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**Paramesh Gopi - AppliedMicro - CEO**

I think Preet made a good point that I actually forgot to emphasize. The reason we got into this market was it was not into the campus datacenter switches first. It was at the service provider edge where all this NSA stuff happened.

Pretty soon the big datacenter operators, because of the NSA and the DoD Snowden Effect, demanded it. Now it is going to be part of every campus interconnect switch, every big, large spine switch. So if you look at the next generation Tomahawk switches that are going to be shipped next year, in front of the faceplate of those switches every Ethernet port, whether it's a 10-gig, 40-gig, 100-gig or, now coming up at dual 100-gig will be MACsec enabled, hardware enabled, SerDes enabled.

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**Unidentified Audience Member**

(Inaudible — microphone inaccessible)?

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

So the question is regarding the acquired NOLs from APM and how does that — is there any affect from the sale of the compute business? So one of the advantages of acquiring the entire company as we have, is we do get full use, subject to the law, subject to a 382 limitation, the use of the NOLs.

And the first use of those NOLs, they'll stay intact 100% with MACOM. And a positive sale of the compute business will probably expect have further use of those NOLs directly applied to the potential gain on the sale of that business. But nothing goes with the compute business. The NOLs stay with MACOM.

Yes?

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**Unidentified Audience Member**

(Inaudible — microphone inaccessible)

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

So the question is, there's been some reports and statements regarding interest in the compute business, and I think that has been — it's accurate. But in this current context and the timing of any transaction, we first have to close the initial acquisition by MACOM of APM. And at this time there are inquiries that are coming in. We're not even in a marketing mode of selling that business, but the momentum is growing. There's an awareness of that asset for sale. And we expect that, post-close, we'd engage, as you would expect, in a thorough marketing of that business and very quickly have a perspective on the potential and the timing of the value of the business and the timing of the transactions close.

**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

That's an excellent question, and it's good to address that right up front. So the question was, post our reported fourth quarter earnings and on our call we emphasized that we came very close to achieving the 60% target of free cash flow to our non-GAAP quarterly net income. We came in at 59%.

And again, that's on a situation where, from a free cash flow measurement perspective, we fund with that cash flow CapEx because our depreciation expense is lower than our actual expenditures. And that's just the dynamic of a formula that uses the cash more so than a more mature business that's having fully depreciated assets, and basically replacing them at the same rate of the depreciation expense.

So we do have transaction expenses to this business. We have bankers, lawyers, accountants, more lawyers, filing fees, solicitation. We have and will position the compute business as an asset held for sale. So it is a one-line balance sheet item on our balance sheet. It is also a one-line income statement item at discontinued operations from a GAAP reporting perspective.

We will identify the synergies both in cash and non-cash. And the additional ones that come in is potential expenses around severance, change in control, contracts that exist with cash payments, any kind of baked goods if we decide to consolidate facilities which has a huge potential in this transaction. We're very adjacent to businesses we have today in locations. And so nothing that you haven't seen in the past.

Let me address the follow-up question. In the past it has consumed cash. And again, I point out that when we report and you look at our cash flow statement on a GAAP basis, there was a reclassification. I call it misclassification, obviously, for renegotiating a key portion of the BinOptics management equity pool that went through operating expenses that was fully funded as part of the sticker price — \$230 million — that went through operating cash flow, because it in essence became a prepaid compensation expense.

And so, that misclassification paid up about \$22 million of cash flow that went through, on a GAAP basis, as operating that was clearly part of the \$230 million that we spent. So I do not see that today in terms of any accounting issues that would create that reclassification. But again, these are part of the transactions, but in the end, the synergies and the profitability and the cash flow from the business will grow at the, at least that we expect, a much faster rate than the overall company growth.

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**Unidentified Audience Member**

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

So the question is, in our presentation on the date of the announcement when we identified the three elements of the APM business between, among, connectivity, embedded processors and the compute business. And in that segmentation, the EBITDA delivered was \$62 million, if you add the two up, because the compute business was negative. That, first of all, to define the number, that was an annualization of the fourth quarter of AppliedMicro's result for those business units.

And you can look to that business and those numbers as a starting point; that is how we look at the overall accretion of the transaction here, that that's the starting point. And what we did — we enhanced that by any synergies and other realignments we make in terms of just expenses, but not including, on top of that, the opportunities that were outlined here for revenue synergies that are very powerful.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

There's two additional points that I could make. So one of them is in that embedded business, a lot of that business approaching end of life. It's a cash cow and there's end of life communications to customers. So it's tailing off fairly rapidly through the year.

It's the reason why when we talk about the accretion we talk about it through the connectivity business because that's the thing that we sustain, and so on. There's also a scenario where there's certain buyers, that they would be interested in taking that embedded business. So that one, depending on where the sale goes, it may come or it may stay.

**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

The question is do we expect \$40 million in terms of the contribution of EBITDA from the acquisition, and we say that that's a minimum? Yes, that's a minimum. Remember, there's financing and dilution from shares — financing costs and dilution from the additional shares.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

That's correct. They will be in the operating business numbers.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

Let me take segment by segment. So in terms of the PON business, our customers are actually projecting flat. They said maybe 10% down in terms of end-market unit shipments. I'm talking about the (inaudible) to supply the entire world. That's for 2.5-gig PON. They're also predicting the uptake of 10-gig PON. There are tenders that have been issued by China Mobile for 20 million units. There's demand behind it. And what we anticipate is after Chinese New Year, that's when we'll see the recovery. Right now we're in a fairly depressed state in that business, so it'll look like growth.

So the second thing is there's a lot of competitor strategies that we have in motion, and I don't want to get into a lot of detail. But we continue to expand share. Not in lasers. We've tapped out at 70%. There's a lot of other content we have to go into those PON boxes that we bundle. So our goal is to keep it minimally flat, maybe even grow it, depending on how — 10-gig PON. By the way, the ASPs for 10-gig PON are about 10-fold higher than 2.5gig. So there's a lot of moving parts just in PON.

Take the Metro long-haul business, and we've got order intake that is absolutely spectacular, but it starts after January. So that's the seasonality that I referred to. And we put together 49% sequential growth in the long-haul Metro stuff last quarter. The point, it's the early stage of the ramp; that business could double, literally double.

Datacenters, we're talking about the share expansion. We've got the lasers coming on. The lasers are probably, what, three times the content of the analog content? So second half of the year we've get a contribution from 25-gig lasers. So there's a lot of juice outside of PON to achieve the growth targets that you referred to.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business**

Yes, so this is 2019 numbers.

**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business**

The question is on the Slide Number 8 that's titled "Leadership Position Addressing Large Optical Networks TAM", what are the TAM numbers today?

PAM-4 is zero. On the OTN MACsec, I don't want to hazard a guess. The combination is \$350 million and 19. I can follow up with you. I don't remember the number off the top of my head. It is quite substantially smaller than 350.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - AppliedMicro - CEO**

I think we talked about this. Most of it is OTN. And a small portion of it, some in the high single digit percentages is MACsec today. Next quarter and the next year you'll see that substantially grow.

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**Preet Virk - MACOM Technology Solutions Holdings, Inc. - Networks Business**

Right. So just to add some color; during our due diligence we were very, very encouraged about the strong ramp of MACsec as evidenced by the backlog. And during our customer diligence calls, that was one of our focus points, is what's driving this ramp.

So OTN, I think I mentioned that earlier too, in the packet optical networks one of the early adoptions was OTN. MACsec came later. And now there's a new generation of parts that actually combines OTN and MACsec.

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**Paramesh Gopi - AppliedMicro - CEO**

Yes, so just to be clear, we had a record quarter last quarter. Most of that came because of our OTN PHYs. About a high single-digit percentage of those PHYs today are shipping with MACsec embedded.

What we're talking about is the next generation of that, which we've already sampled. And by the way, that is what Preet is referring to because that's going after that campus interconnect and the campus reach interconnect in much more pervasive black notes.

Yes?

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - AppliedMicro - CEO**

We already have 10-gig. It's part of the switch portfolio. Our expectation is that probably in the next year, six months to a year, we'll have it. Recognize that the — one of the things that they don't have that we do is the fact that we have preserved all of our OTN long-haul second investments while Alago has decided it's too small of a market for them. So this is an interesting combination that we've been able to craft for this emerging market.



**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - *AppliedMicro* - CEO**

It doesn't, primarily for two reasons. One is if you look at the core density of the switch today there's still 50-gig in a core. You're talking about 200-gig MACsec. The SerDes and the gear-boxing into the mixed signal is so different because the faceplate densities of a switch do not take into account MACsec today. So in other words, you have to have other mixed signal components that bridge the switch into the fiber, which is where this becomes a very important part. It's the same reason why PAM-4 is not integrated into switches today.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Preet Virk - *MACOM Technology Solutions Holdings, Inc.* - *Networks Business***

Yes, the question is are the datacenter drivers today in 16-nanometer? So on that picture that I had, if you think about sort of digital domain and analog domain — I'm going to make some gross generalizations to get my point across. For the PAM-4 PHY it's in a CMOS process. The laser driver of the TIA, which we call as the analog components, they're actually in silicon germanium, so it's a totally different process to cover.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - *AppliedMicro* - CEO**

The pick, again, bores amplified. Think of that as the replacement for the traditional optical mux/demux. So it's a wave guide. Again, different process technology. It's not silicon germanium that actually goes back to CMOS.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**John Croteau - *MACOM Technology Solutions Holdings, Inc.* - *President, CEO***

It's March time frame.

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**Preet Virk - *MACOM Technology Solutions Holdings, Inc.* - *Networks Business***

We did a port type demonstration at the last OFC. At this OFC you will see the volume production material.

**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

So implicitly in that comment, when you're sitting in December from, we're talking about March, wafers are in line, and if the wafers are in line it means the customer validation is complete. So the technology risk has been resolved. It's fully validated. It's just a matter of completing the semi-conductor qualification, life tests and so on.

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

John, just one final point on PON and laser; there is only Macom that has invested in the capacity to meet the uptick in the PON market to begin with, which was at a time, strangling the industry a year and a half ago — or the time that we bought

BinOptics.

That situation is going to be worse for the rest of the marketplace in terms of available capacity. And today Macom is the only company that has laser capacity to meet the expected demand.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Yes, so let me expand upon that. So for those who may not be familiar with the BinOptics story, we acquired that at a time where there was a critical shortage of laser components to service the PON market. It was, I mean, it was a critical shortage. Customers could not ship, customers like Wylie and ZTE. Through the acquisition of BinOptics and doubling first, doubling our capacity within six months and doubling it yet again within a year, we resolved that supply issue. And that's the reason why we've raced to 70% share.

We went from a player to a strategic partner. That's what that basically did. I can tell you whether it's PON and especially datacenter, there is not a technology to do these DML lasers other than Etched Facet technology that has the requisite cost structure and capacity. So we really stand alone. People see us, customers see us, standing alone with the right cost structure and the right capacity to be able to service that mega-market, even more of an issue than what PON was experiencing. So it's a ready-made market. We're just rolling out the lasers. And the uptake is, should be relatively instantaneous.

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**Unidentified Audience Member**

(Inaudible - microphone inaccessible)

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**Paramesh Gopi - AppliedMicro - CEO**

Let me answer the first question. It's sold in conjunction with a framing device and the SerDes. So it's one chip. MACsec is a hardware cryptography engine that's instate machines, on that chip, linked to an analog mixed signal SerDes. And you usually see it in instantiations 12 by 10-gig, 3 by 40-gig, 6 by 40-gig, 2 by 100-gig.

So all of the chips that we sell today with the routers can essentially do multi-rate MACsec. The biggest disruption we've got is now we put 200-gig that can be demuxed and muxed into any — either contaminated or muxed into any combination of 10 and 40 to do this. And it's completely interoperable with the root MACsec platforms at Cisco. That's the biggest — because they invented it for the DoD and the NSA and the agencies.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Do they sell to Alago?

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**Paramesh Gopi - AppliedMicro - CEO**

No.

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

Not that we wouldn't. Not in our business plan. Exactly.

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**Paramesh Gopi - AppliedMicro - CEO**

Yes, obviously, it's not in the models.

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**Steve Ferranti - MACOM Technology Solutions Holdings, Inc. - VP of IR**

Okay, thanks everyone for attending. And as I said, we'll be around if anybody has any follow up.

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**John Croteau - MACOM Technology Solutions Holdings, Inc. - President, CEO**

Thank you.

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**Paramesh Gopi - AppliedMicro - CEO**

Thank you.

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**Forward-Looking Statements and Use of Non-GAAP Financial Measures**

DISCLOSURE NOTICE: This document contains forward-looking information related to MACOM, AppliedMicro and the proposed acquisition of AppliedMicro by MACOM that involves substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Forward-looking statements in this document include, among other things, statements about the potential benefits and synergies, strategic plans, divestitures, cost savings, accretion, revenue, margins, market share capture, competitive position, integration and financial and business expectations associated with the acquisition, the price of the transaction, the consideration used in the transaction and the anticipated timing of closing of the acquisition. Risks and uncertainties include, among other things, risks related to the satisfaction of the conditions to closing the acquisition (including the failure to obtain necessary regulatory approvals) in the anticipated timeframe or at all, including uncertainties as to how many of AppliedMicro's

stockholders will tender their shares in the tender offer and the possibility that the acquisition does not close; risks related to the ability to realize the anticipated benefits of the acquisition, including the possibility that the expected benefits from the proposed acquisition will not be realized or will not be realized within the expected time period; the risk that the businesses will not be integrated successfully; disruption from the transaction making it more difficult to maintain business, contractual and operational relationships; negative effects of this document or the consummation of the proposed acquisition on the market price of MACOM's common stock and on MACOM's operating results; significant transaction costs; unknown liabilities; the risk of litigation and/or regulatory actions related to the proposed acquisition; other business effects, including the effects of industry, market, economic, political or regulatory conditions; future exchange and interest rates; changes in tax and other laws, regulations, rates and policies; future business combinations or disposals; the uncertainties inherent in research and development, including the ability to sustain and increase the rate of growth in revenues for AppliedMicro's products; and competitive developments.

A further description of risks and uncertainties relating to MACOM and AppliedMicro can be found in their respective Annual Reports on Form 10-K for the fiscal years ended September 30, 2016 and March 31, 2016, respectively, and in their subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (the "SEC") and available at [www.sec.gov](http://www.sec.gov).

We make references in this document to certain financial information calculated on a basis other than in accordance with accounting principles generally accepted in the United States ("GAAP") including non-GAAP gross margin and operating margin, non-GAAP earnings per share, non-GAAP revenue and non-GAAP free cash flow. These non-GAAP measures are provided to enhance the user's overall understanding of the potential impact of the AppliedMicro transaction. We are unable to provide a quantitative reconciliation of these non-GAAP measures to the most directly comparable GAAP measures because we cannot reliably forecast transaction, integration and other costs related to the AppliedMicro transaction, which are difficult to predict and estimate.

The information contained in this document is as of November 30, 2016. Neither MACOM nor AppliedMicro assumes any obligation to update forward-looking statements contained in this document as the result of new information or future events or developments.

### **Additional Information and Where to Find It**

The exchange offer for the outstanding shares of AppliedMicro stock described in this document has not yet commenced. This document is for informational purposes only and is neither an offer to purchase nor a solicitation of an offer to sell shares, nor is it a substitute for any materials that MACOM and its offering subsidiary, Montana Merger Sub I, Inc. ("Purchaser"), will file with the SEC.

Purchaser plans to file a Tender Offer Statement on Schedule TO, together with other related exchange offer documents, including a letter of transmittal, in connection with the offer; AppliedMicro plans to file a Recommendation Statement on Schedule 14D-9 in connection with the offer; and MACOM plans to file a

Registration Statement on Form S-4 that will serve as a prospectus for MACOM stock to be issued as consideration in the offer and the acquisition. These documents will contain important information about MACOM, AppliedMicro and the acquisition. AppliedMicro stockholders are urged to read these documents carefully and in their entirety when they become available before making any decision regarding exchanging their shares. These documents will be made available to AppliedMicro stockholders at no expense to them and will also be available for free at the SEC's website at [www.sec.gov](http://www.sec.gov). Additional copies may be obtained for free by contacting MACOM's investor relations department at 949-224-3874 or AppliedMicro's investor relations department at 415-217-4962.

In addition to the SEC filings made in connection with the transaction, each of MACOM and AppliedMicro files annual, quarterly and current reports and other information with the SEC. You may read and copy any reports or other such filed information at the SEC public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. MACOM's and AppliedMicro's filings with the SEC are also available to the public from commercial document-retrieval services and at the website maintained by the SEC at <http://www.sec.gov>.

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