

## Calix: Cheap For A Reason

May 15, 2019 1:19 PM ET4 comments | 1 Like

by: Steve Kamman

### Summary

- On the face of it, Calix's outlook is promising. A major role in Verizon's Intelligent Edge nationwide build. Also a similar UK build with CityFibre. Wins on innovation, not price.
- Both of these nationwide network builds started in 2019. They will ramp up into 2020 and run strongly into the mid-2020's.
- The stock is cheap on consensus estimates because confidence in Calix's execution is (deservedly) low. It also has a relatively thin cash cushion.
- If Calix and its contract manufacturer execute over the next months, those estimates will have more numerical support. This should re-set the valuation for a potential 2x or greater return.

Editor's note: Seeking Alpha is proud to welcome Steve Kamman as a new contributor. It's easy to become a Seeking Alpha contributor and earn money for your best investment ideas. Active contributors also get free access to the SA PRO archive. [Click here to find out more »](#)

Calix (CALX) consensus estimates reflect rising revenues with increasing gross margins on fairly flat operating expenses. Yet the stock is only trading at 0.73x 2020 EV/Sales and a 13.2x 2020 PE according to the Reuters Eikon consensus estimates.

The stock looks even cheaper digging into the details of those consensus estimates. Current consensus for 2019 is \$439m revenues and -\$0.03 EPS - exiting 4Q19 at \$0.07 or a \$0.28 annualized run rate. 2020 consensus is \$492m revenues and \$0.52 EPS - exiting 4Q at \$0.23 or a \$0.92 annualized run rate.

At the 2020 forward S&P 500 multiple of 17.54, Calix is a \$9 stock (36% upside) on full year 2020 EPS and a \$16 stock (143% upside) on consensus 2H2020 EPS.

Calix should also, arguably, attract an above-market growth multiple if it delivers to those consensus estimates.

### The Market Is Marking Down Calix for Good Reason.

Investors have low confidence in those consensus forecasts. Calix has a track record of weak execution and a thin cash cushion (\$14m net cash in 1Q19 plus their \$30m revolving credit facility). If Calix mis-executes or hits a negative macro shock, the company could face existential risk. That explains the discounted valuation.

**If Calix does deliver over the rest of 2019, the balance of risks should shift to the more positive outlook embedded in those consensus numbers.** Reported numbers and guidance should start to flip that equation after their early August 2Q19 earnings call.

I see good odds for that positive shift in perception/valuation. Admittedly, execution is not Calix's strong suit. But the most recent execution problems stem mostly from their contract manufacturer (per the 1Q19 transcript here). Contract manufacturers are generally competent, so a quick resolution is a safer bet than it may appear to be.

A valuation re-rating also depends on investors noticing the change and believing it. Calix's is off most investors radar screens. Good execution could remain discounted for a while. Better disclosure and structural improvements (like hiring a competent COO) would also help. Neither, however, seem to be in the offing.

I'm making the valuation case above on consensus estimates. My own estimates are more optimistic. 2019 Revenues/EPS of \$470m/\$0.34 exiting at \$0.80 annualized (assuming a solid 2H bounce-back from the production delays). 2020 Revenues/EPS of \$557/\$0.83 exiting at \$1.12 annualized (assuming Verizon (VZ) and CityFibre (private) continue to ramp and the RLECs come back to life). If those more optimistic estimates prove correct, Calix is a \$14.50 to \$19.65 stock at the market multiple.

Given the current low valuation, the directionality of any estimates - consensus or mine - matter more than the specifics.

Consider this a high risk, binary bet. I have no plans to trade it either way. I am waiting for confirmation of the below on their early-August 2019 call.

## **Business Summary**

Calix makes last mile access gear for telecom and cable companies, with a particular focus on fiber. In wireless networks, 5G and densification of 4G networks requires more fiber to more antennas deeper into neighborhoods. In wired networks, fiber is (finally) superseding copper for consumer broadband and small/medium business services in telco and cable plants globally. These are durable trends.

## **2019 - 2021 Outlook**

**2019: A combination of underlying demand and unfilled 1H19 orders should bring Calix to cash and EPS positive results in 2H19.** Major new contracts with Verizon and the UK's CityFibre will keep ramping through 2019 (VZ press release here, CityFibre release here). On top of that already growing revenue base, about \$10-\$20 million of delayed shipments should flow into 2H19 out of 1H19.

The delayed shipments are the result of 1Q19 production delays from a tariff-driven manufacturing shift out of China. Those delays illustrate the poor execution that has dogged Calix for several years now.

Going forward, however, we are betting **less on Calix's execution and more on their contract manufacturer's**. We know their (unnamed) contract manufacturer is on the hook to fix the problems and paying high expediting costs in the meantime (per the 1Q19 transcript here). They have every incentive to resolve these production problems quickly. So the solution to Calix's present execution issues lies mostly in the hands of a (presumably) competent, motivated partner.

**Gross Margins are improving.** Calix's product gross margins have been heading higher as software becomes a larger part of their product mix. That trend started in 2018. It should continue through 2019 and into 2020. Management has been frustratingly vague

about how high gross margins can go. But, given the high (80%-90%) margins inherent in software vs lower margin (43%-47%) hardware, one can reasonably expect overall margins to head over 50% (further discussion below).

**Strong Operating Leverage.** Opex should stay relatively flat while revenues and gross profits increase. The business model in general has high natural operating leverage. R&D and G&A were 27.5% of revenues in 2H18 and 31.5% in production-hit 1Q19. These costs won't rise in step with revenues and should stay relatively flat. Sales costs do move more with revenues, but these only ranged between 18%-22% of sales in 2018. Management is vague about specific operating cost targets, however.

Note that Calix took down operating expenses by 12% YoY over 2018. This is partly belt-tightening, but mostly structural. The same technology shift that is driving higher gross margins (a common, software based platform) has also allowed Calix to spend less R&D on designing and updating individual product SKU's.

**2020 Revenues of \$500m to \$600m and Earnings in the \$0.50 to \$1.00 range seem reasonably achievable.** Verizon, CityFibre, and others (e.g. rural electric cooperatives – the “emerging customers” mentioned on the call) will continue to ramp up spending. Software-driven gross margins will keep going up. Operating expenses should stay fairly flat. Struggling RLEC customers CenturyLink (CTL), Frontier (FTR), Windstream (OTCPK:WINMQ) *et al* are likely to come back to life in some fashion in 2020. Windstream for example is in bankruptcy now and should emerge by 2020. CenturyLink will have decided the future of its consumer business. Even if the RLECS don't get much better, they don't get worse...

**Looking to 2021, revenues and EPS above that 2020 level are also achievable.** The underlying demand outlook is strong with 5G ramping up, telcos giving up on band-aid copper broadband technologies like vectoring, and broadband itself becoming a basic utility.

### ***Risks: Revenue, Execution, and Governance***

**Revenue Risk:** I think this is mostly in the rear-view mirror, but I could be wrong. The public, regional RLEC telcos - CenturyLink, WindStream, Frontier, Consolidated (CNSL), etc. - are (or were) major customers for Calix. They were up to 50% of sales in prior years. They are a smaller part of Calix's revenue mix now (management is frustratingly vague on how much smaller).

The RLECS are cash strapped and not spending on broadband fiber upgrades. Even though eventual fiber upgrades are their only hope of continuing viability. Windstream is in bankruptcy. CenturyLink is looking into selling its Consumer division (promising to keep investing but clearly not so far). Others - Frontier, Consolidated - have cut their dividends. My views is that the RLECs current spending is (probably) burned down close enough to the ground that they can't drop much further. For my 2019 outlook to play out, they just need to keep spending at current life-support rates. 2020 probably sees them come back to life.

**Execution Risk:** This is a past and ongoing risk that has dogged Calix for several years now. Execution has been weak. The 1Q19 production problems are part of a long track record of (often self-inflicted) problems. The execution risk today is magnified by a fairly thin cash cushion - only \$14m net cash plus a \$30m revolver per their most recent

quarterly report. That thin cash cushion is itself a result of poor prior execution. This is a cycle Calix hasn't seemed able to break – at least not with current management operating seemingly with impunity.

**Governance and Management Risk:** Unfortunately, Calix does not represent a significant portion of the net worth for the CEO (even though he owns 12.09% of Calix per their proxy). He made his fortune with a well-timed 1999 sale of Cerent to Cisco for \$7.2bn at the height of the dot-com bubble. That relative lack of skin in the game may explain the air of blithe unconcern that seems to pervade Calix's execution, communications, and approach to risk.

The Board has also not, so far, taken any clear course-corrective actions. An obvious step would be to add a COO with strong execution skills to complement the CEO's more visionary leadership approach. Personal relationships and sentiment may be playing a role in the Board's inaction. Two Board member's (the Chairman and a Director) worked alongside the CEO at Cisco in the dot-com era. One activist investor did fight his way to a Calix Board seat in early 2018 (J. Daniel Plants of Voce Capital). His impact has, however, been hard to discern so far. Calix also has a staggered board and poison pill provisions in place. Both are potential barriers to further activism. The CEO is up for re-election in this proxy cycle. A substantial "Withhold" vote could attract more activists.

### ***Verizon Win is Evidence of Technology Innovation***

The last mile access market segment is usually seen as price-driven. Calix's software-based products are, however, innovative and meaningfully differentiated. We don't need to just take Calix's word for that. The Verizon contract win confirms that innovation is real and valuable.

Calix's AXOS software is a major, foundational element of Verizon's marquee Intelligent Edge nationwide network build. The new Verizon CEO has bet the company on this build. That may sound unlikely for a sub-\$400 market cap company, but read the press release. Calix is Verizon's only NG-PON2 last-mile fiber access equipment supplier and seems likely to stay that way.

Verizon's Intelligent Edge is often seen as just as an enabler of 5G. In fact, Verizon's objectives are to cut operating costs by a stated 80% relative to the cost of Verizon's old network model. Achieved by collapsing the residential, business, and wireless networks onto a single physical, software-separated platform. You can hear Verizon's Executive Lee Hicks' own description of the goals, design, and strategy at about the 5 minute mark of this video from Calix's 2017 conference. 5G wireless is a certainly a part of that story, but there is a lot more to it.

Verizon does not usually hand out large contracts to small, non-incumbent suppliers like Calix. Verizon also generally seeks two suppliers for any major network element. We know Verizon was originally looking for a second source. Peer Adtran (ADTN) talked about contesting that Verizon contract in their 2H17 and 2018 earnings calls.

Today, 18 months later, Adtran has stopped mentioning that Verizon opportunity. Verizon's build is underway. Calix is still the sole source. The other likely potential supplier – Nokia (NOK) – has never mentioned Verizon as a potential access customer and (I believe) dropped out of the running in 2017.

**We can also conclude Verizon didn't make its decision on price.** Adtran can buy from the same hardware component suppliers as Calix. If it were a matter of cost, Adtran would have eventually engineered a competitively priced alternative. What Adtran presumably couldn't deliver was software functionality to match Calix's new AXOS operating system - virtual separation of wireless, business, and residential. Those AXOS features were evidently worth enough for Verizon to take the risk on Calix.

### ***Other Calix Customers and Segments***

**Calix is also the sole supplier to well financed, private UK operator CityFibre.**

CityFibre is commencing a nationwide fiber build to 2+ million homes now and (eventually) 5 million homes as well as most UK central business districts. That build also ramps in 2019 and 2020 and should run to the mid-2020's or beyond.

CityFibre is building a wholesale network with Vodafone (NASDAQ:VOD) as its anchor tenant. The appeal to CityFibre and Vodafone appears to be the same software-separated AXOS architecture that appealed to Verizon.

Vodafone likely wants the same one-box, software-separated access architecture as Verizon for the same cost-saving reasons.

*CityFibre also needs the same layer of separation to isolate Vodafone from other wholesale customers they might sign up.* Telefonica (TEF) has a large wireless business (O2) in the UK and is reported to be considering entry into the UK wireline business via a wholesale arrangement. CityFibre would seem an obvious potential supplier for that entry. Or they might just sell O2 or others simple wireless backhaul for 5G.

Calix has been historically strong in **smaller rural and small-town US telecom companies**. The larger, publicly traded ones are struggling. But there are over 1,000 non-public telcos serving small towns and regions across the US. Many building out fiber and generally running their businesses to stay viable. Most of these small telcos came about because AT&T was never going to build telephony fast enough to a lot of rural America. So locals did the job themselves. The same build-it-yourself dynamic is playing out with rural broadband. Aided by substantial government subsidy via the CAF 2 program.

Calix also has promising new prospects with **Rural Electric Cooperatives entering the broadband market**. Like with the telcos, many small towns built their own utilities to get electric power vs waiting for the big-city utilities to get around to them. Today, these electric co-ops finally seem to be getting serious about building fiber. Possibly in response to faltering electricity demand as solar takes off (particularly in rural areas where electric rates are high and land for panels is cheap). The exact potential and size of this market is another place where Calix is frustratingly vague, but it is net new demand.

Calix's largest customers have historically been the larger **RLECS – CenturyLink, Windstream, Frontier, Consolidated, etc...** These players have prioritized dividends over fiber network investment for years. That has finally caught up with them. I see their only path forward as (finally) starting that delayed network investment. That has been obvious (to me) for years. But they have ignored the obvious for far longer than I ever thought possible. Their current crises may finally force that course-correction. At the least, I don't think their spending can decline much further. They do have legal obligations to offer service. They also face growing political pressure to build out fiber.

Beyond all the above is the simple fact that **broadband is becoming a basic utility** on par with electricity and telephony before it. A pure play on that long-term trend should be a good investment. With better execution, a lot more of that promise would be priced into Calix today.

### ***Calix' Product Gross Margins Have Been (Structurally) Improving Over the Course of 2018.***

Products are over 90% of Calix's revenue. The rest is services related to those products.

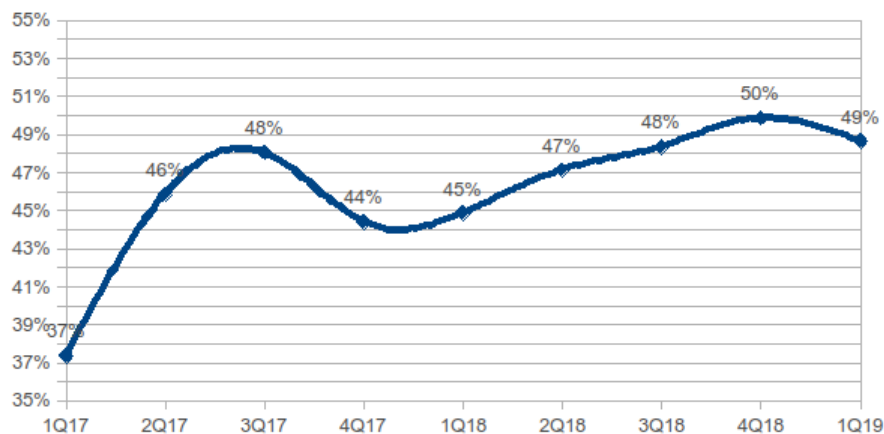
Calix's old products ran at about a mid-40% gross profit. Calix's new products are more software-based. That means about a 43%-47% gross profit for the hardware plus 80%-90% gross profit software licenses. A combined 50%-60% gross profit looks reasonable as the gear carries more subscriber traffic.

New products are still a small (undisclosed) part of total revenues. But the new products are what's growing. Those are what Calix is selling to Verizon and CityFibre.

So overall gross profits (products plus services) should creep up past 50% in 2019. 2020 and 2021 should see margins improve further. If Calix's new products become 40% of the revenue mix in the next 12-18 months, that gets to about a 55% gross profit.

Also note that Calix's software revenues have a partial per-user-served price element. That means profitability will improve further as Service Providers load live customer traffic on their new networks.

Rising Product Gross Margins are Structural



Source: Calix Pro Forma Product Gross Margins As Reported

As noted above, I own the stock. I'm setting out the above as an overview and to outline what expectations might (or might not) be baked into it. I've tried to be balanced about it. I don't know your personal situation and objectives. Those must be the starting point for any investment decision you make.

**Disclosure:** I am/we are long CALX.

Comments (4)

E. James Sackman, Contributor

Nice article. I do have one big challenge with it. The 5G roll-outs are TBD at the moment. There is a LOT and I mean a LOT of discussion on how this will be carried out. For example, there are proponents of a 5G antenna on every lightpole in NYC. I see that as highly unlikely as we would need at least 3 (Verizon, AT&T, and Tmobile/Sprint). The construction costs on this would be outlandish. And it is not clear that there is upside revenue for it. I think what you are going to see are many Sacramento-like trials of different models. Until we get through those and see what will happen, the value of NG-PON2 is not clear. It is a potential upside for Calix, but it is not a clear slam dunk.

The other comment I will make is that one can not expect the RLECs to grow as a market. Cable has a much lower price point to DOCSIS 3.1 than Telcos do to a meaningful Broadband play through wireline growth. Coupled with the loss of fixed line voice revenues, these companies need a strategic overhaul. And 3 of the 4 big ones have had challenges recently. The fourth, Centurylink, is trying to be something other than an RLEC. It has more lines than Verizon does and some major properties: Las Vegas, Seattle, Portland, Denver, Minneapolis and Phoenix. I think considering Century an RLEC is probably a bad way of viewing them moving forward.

15 May 2019, 01:53 PM

---

**Steve Kamman, Contributor**

Author's reply » Thanks. I fully agree 5G is very TBD. But the linked Verizon video and other research I've done makes it clear their build is going forward regardless. It is much less about 5G and much more about structural operating cost reduction. It is also necessary just to add fiber backhaul density out of VZs serving region for plain old 4G. Business services sales out of region help pay for it and any consumer wireless broadband or 5g revenues are gravy on top.

RLECS have to spend. Damned if they do, but certainly damned if they don't. Their costs are fixed and their revenues are variable. Like an apartment building or hotel owner who doesn't ever renovate to pull maximum cash flow out of the building. It works great for a while, but at some point you can't find new hotel guests or tenants for a decrepit building no matter how low you cut the rent. But your heating and cooling and basic upkeep costs stay fixed as revenues drop. You can try to sell the building, but the buyer is going to subtract the cost of that deferred renovation and repair work from their maximum purchase price. I expect CTL will discover this if they can even manage to shake loose an offer for their consumer business. Or you can do the work yourself and keep collecting rents at full occupancy. CTLs new management spoke to that calculation on their call.

The RLECS do have the raw cash flow to do the work. That cash flow is just going to dividends and debt service not Capex. They have cut dividends. For CTL, that is probably enough to renovate at least some parts of their rotting fixed assets. The others are more strapped, but at some point they will just default on the debt (like Windstream). What will never go away is the rotting fixed asset. Whoever ends up owning it will have to do that renovation work. In 2020, I think CTL and Windstream at least will come back to life in some fashion.

Cheers

16 May 2019, 09:53 AM

---

**E. James Sackman, Contributor**

The RLECs can't spend:

- Windstream - Chapter 11
- Frontier - Debt so high that it is valued at 5% of Revenue
- Consolidated - Cut dividend to pay off debt
- Century - Announced that it is looking at dumping consumer assets (think here rural properties not Vegas)

That is the problem. You are right that they should spend, but CAPEX for these companies will be going down for Calix and Adtran access products.

17 May 2019, 11:57 AM

---

**Steve Kamman, Contributor**

Author's reply » Specific to Calix, all we really need now is for the RLECs to not fall further in 2019. Looking out past that, however, the RLECS can and must spend.

This is exactly what bankruptcy is designed to do. The assets are producing enough cash to fund capex, but not enough to pay off debt or dividend on top of that. In that equation, the debt becomes the variable. The assets and cash flows stay the same.

- Windstream - bankruptcy plays out. They emerge with less debt (reportedly going after even their Ubiquiti contract) and the same cash flows. No-one will going to give them new money to just pay it back out as a dividend. New financing will have to go toward improving cash flows (building out fiber and cutting operating costs with a new lower-cost network model like VZ is doing).

- Frontier, Consolidated, etc... - The Windstream process will make it that much harder to keep pretending the Emperor is wearing any clothes. Maybe a pre-packaged bankruptcy where they go in, wipe out the equity and 30c of every dollar of debt. They come out with enough breathing room to start investing again. Per the above, no-one is going to give them funding unless the money goes into the underlying asset.

- CenturyLink - PEr the above, the problems of Consumer are obvious to everyone, so my guess is they don't find a buyer at a price worth accepting. The likely buyers are the RLECs above and they are all going bust. I also think the State PUC's have gotten smart about these sales and public pressure for better broadband has increased, so selling it without a "real" re-investment plan (and thus a much lower sale price) would be really hard.

Plan B is to do the investment themselves. Worth reading their call closely. My take was "We are going to explore every avenue to get the Consumer assets off our books because our shareholders are pressuring us to. We suspect we're stuck with it because the operational challenges and costs would be daunting and the price we'd get would be lousy. So I'd guess we end up stuck with it and the ongoing investment obligation. But maybe we're wrong so we'll make a good faith effort and see where the chips fall."

In all of the above, managements and investors will have to face the reality the equity is worthless and the debt may only be worth 70c for every dollar lent. That is painful which is why they have postponed that reckoning for so long. But reality eventually wins. What is left over is new investors, potentially new management, and the same assets with the same investment needs.

21 May 2019, 12:17 PM