



Capital
Markets

September 20, 2019

BlackBerry Limited

Q2 preview: Cylance is still the focus

Our view: We do not expect BlackBerry's Q2 to materially alter the bull-bear debate on the stock, as we anticipate Q2 results essentially in line with the Street, BlackBerry is likely to reiterate its FY20 guidance, and BlackBerry's shares have already rallied 13% off the August lows. The primary focus for the quarter will be Cylance's growth and its sustainability. Maintain Sector Perform.

Key points:

- **Expect Q2 revenue in line with the Street.** BlackBerry is reporting Q2/ FY20 (quarter ended August) on September 24, before market open. We expect Q2 non-GAAP revenue to rise 24% Y/Y (-1% organic) to \$265MM, essentially in line with the Street at \$266MM. For adj. EPS, we expect \$0.00 Q2, slightly above the Street at -\$0.01 on lower costs.
- **Focus on Cylance's growth momentum.** Cylance exceeded expectations last quarter, with \$51MM revenue, up 31% Y/Y, above our estimate for \$49MM. Our outlook calls for Cylance revenue to rise 6% Q/Q to \$54MM (est. 30% Y/Y), which assumes modest deceleration compared to Cylance's average of ~8% Q/Q in last 4 quarters as a private company. Data from LinkedIn suggests Cylance's headcount has remained steady (just -1%) since Q1/FY20; however, the President and founder of Cylance, Stuart McClure, appears to have left the company, based on filings on SEDI.
- **ESS and BTS revenue likely to increase sequentially.** We forecast ESS revenue to rise 12% Q/Q on seasonality to \$93MM (up 1% Y/Y). Our forecast does not include the large single digit million Secusmart license deal expected to close Q2/Q3; if the large deal closed Q2, upside to our forecast is possible. For BTS, we expect revenue to increase 17% Y/Y to \$57MM. BlackBerry announced an expanded partnership with Jaguar Land Rover and the launch of digital instrument clusters at Subaru. We expect IP revenue to be flat Y/Y at \$56MM, down from \$72MM Q1.
- **Discounted valuation, though growth catalysts needed.** Despite the 13% rally in BlackBerry's shares from the August lows (vs. S&P500 +6%), BlackBerry is trading at just 3.3x FTM EV/S, below enterprise security peers at 4.1x and near the low-end of its 2-year historical range (2.7-6.3x). BlackBerry's stock values Cylance at 3.9x FTM EV/S, below peer CrowdStrike at 34x FTM EV/S and the takeout of peer Carbon Black at 8.0x FTM EV/S. In our view, stronger organic growth in several of BlackBerry's core businesses (ESS, BTS, Cylance) is needed to justify higher valuation multiples.
- **Maintain Sector Perform, \$9.00 target.** Our \$9.00 target equates to 3.6x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 3.0x CY20e EV/S, BTS (QNX/ Radar) at 4.5x, IP licensing at 2.0x, and Cylance at 5.3x CY20e EV/S, plus \$603MM net cash.

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Sector: Telecom & Networking Equipment

Sector Perform

NYSE: BB; USD 7.57; TSX: BB

Price Target USD 9.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input checked="" type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	551.8	Market Cap (MM):	4,177
Dividend:	0.00	Yield:	0.0%
		Avg. Daily Volume:	3,368,989

RBC Estimates

FY Feb	2018A	2019A	2020E	2021E
Revenue	967.0	916.3	1,145.4	1,262.5
EPS, Ops Diluted	0.14	0.23	0.08	0.28
P/E	54.1x	32.9x	NM	27.0x

Revenue	Q1	Q2	Q3	Q4
2019	217.0A	214.0A	228.3A	257.0A
2020	267.0A	264.9E	297.2E	315.9E
2021	292.8E	292.5E	328.3E	349.0E

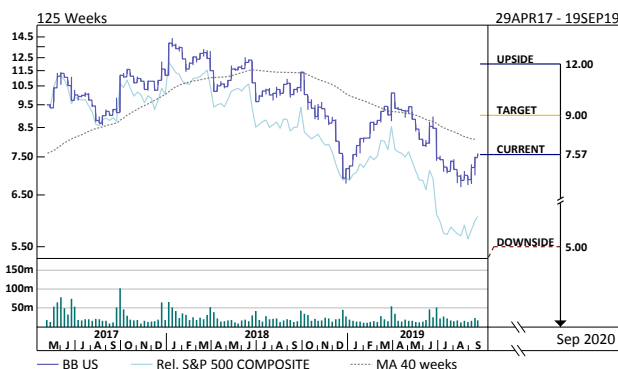
EPS, Ops Diluted	Q1	Q2	Q3	Q4
2019	0.03A	0.04A	0.05A	0.11A
2020	0.01A	0.00E	0.02E	0.04E
2021	0.05E	0.05E	0.08E	0.09E

All values in USD unless otherwise noted.



Target/Upside/Downside Scenarios

Exhibit 1: BlackBerry Limited



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our \$9.00 price target equates to 3.6x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 3.0x CY20e EV/S, BTS (QNX/Radar) at 4.5x, IP licensing at 2.0x, and Cylance at 5.3x CY20e EV/S, plus \$603MM net cash.

Upside scenario

For our upside scenario of \$12.00, we assume faster organic growth of BlackBerry's software business (including enterprise, QNX, IoT, and IP licensing). In this more optimistic scenario, we assume 10% software & services revenue (excluding Cylance) growth FY20e. Our \$12.00 scenario values BlackBerry's software business at 4.8x on \$1.32B CY20e software revenue.

Downside scenario

For our downside scenario of \$5.00, we assume a slower rate of growth of Enterprise Software. In this more pessimistic scenario, we assume 5% software & services revenue (excluding Cylance) growth FY20e. Our \$5.00 scenario values BlackBerry's software business at 2.0x on \$1.22B CY20e software revenue.

Investment summary

BlackBerry has successfully transitioned its business away from handsets to enterprise software. Our Sector Perform thesis reflects our view that BlackBerry is trading near fair value and stronger growth is required to drive material upside for the shares.

- **Valuation appears near fair value.** BlackBerry is currently trading at 3.3x FTM EV/S, below enterprise security peers at 4.1x and its 2-year historical average (4.5x). In our view, we need to see significantly stronger growth in several of BlackBerry's core businesses (ESS, BTS, Cylance) to justify material upside for the stock. Possible catalysts for the stock include new design win announcements, IP licensing upside, and accelerating revenue growth at Cylance.
- **Cylance expected to amplify short-term volatility.** The \$1.4B Cylance acquisition reduces BlackBerry's net cash from \$3.37/share Q3 to a \$0.65/share Q1, or 40% of BlackBerry's share price to 9%. The reduction in BlackBerry's net cash reduces a key backstop for the stock and is likely to amplify share price volatility around quarterly results and changes in investor sentiment regarding future growth.
- **Visibility to future growth in emerging segments is not clear.** BlackBerry has secured a number of design wins in the automotive segment. While positive, we believe the future revenue from these design wins is difficult to predict considering that penetration is unknown and pricing pressure has reduced ASPs in the automotive segment. BlackBerry Radar appears compelling but early-stage, particularly relative to competitors that have established distribution channels and sales to end customers.



Q2 preview: Cylance is still the focus

We do not expect BlackBerry's Q2 to materially alter the bull-bear debate on the stock, as we anticipate Q2 results essentially in line with the Street, BlackBerry is likely to reiterate its FY20 guidance, and BlackBerry's shares have already rallied 13% off their August lows. The primary focus for the quarter will be Cylance's growth and its sustainability. Maintain Sector Perform.

Q2 preview

BlackBerry reporting Q2/FY20 results on September 24. BlackBerry is reporting Q2/FY20 (quarter ended August 2019) on Tuesday, September 24, before market open. A conference call is scheduled for 8:00 a.m. ET. Dial-in: 877-682-6267. Replay: 800-585-8367; ID#6987534.

Expect Q2 revenue in line with the Street. We expect Q2 non-GAAP revenue to rise 24% Y/Y (-1% organic) to \$265MM, essentially in line with the Street at \$266MM. We anticipate GAAP revenue (which reflects the non-cash deferred revenue writedown from purchase price accounting related to the acquisition of Cylance) at \$245MM, up 17% Y/Y. For adj. EPS, we expect \$0.00 Q2, slightly above the Street at -\$0.01 on lower costs. GAAP EPS is expected at \$0.00.

Exhibit 2: RBC's Q2 revenue estimates are essentially in line with the Street

\$MM, except per share items	Q2/FY20e		Q2/FY19	Y/Y %	Q1/FY20	Q/Q %
	RBC	Consensus				
Revenue:						
Enterprise Software & Services (ESS)	\$93	\$93	\$92	1%	\$83	12%
BlackBerry Technology Solutions (BTS)	\$57	\$57	\$49	17%	\$54	6%
Licensing, IP and other	\$56	\$56	\$56	0%	\$72	-22%
Cylance	\$54	\$54	n/a	n/a	\$51	6%
Handheld Devices	\$0	\$0	\$5	-100%	\$0	n/a
SAF	\$5	\$3	\$12	-62%	\$7	-35%
Total Revenue	\$265	\$266	\$214	24%	\$267	-1%
Gross Profit	\$196	\$188	\$167	17%	\$199	-2%
Gross Margin	74.0%	70.9%	78.0%		74.6%	
Adj. EBITDA	\$20	\$20	\$33	-39%	\$23	-14%
Adj. EBITDA Margin	7.6%	7.5%	15.4%		8.8%	
Adj. EPS	(\$0.00)	(\$0.01)	\$0.04	-107%	\$0.01	-126%

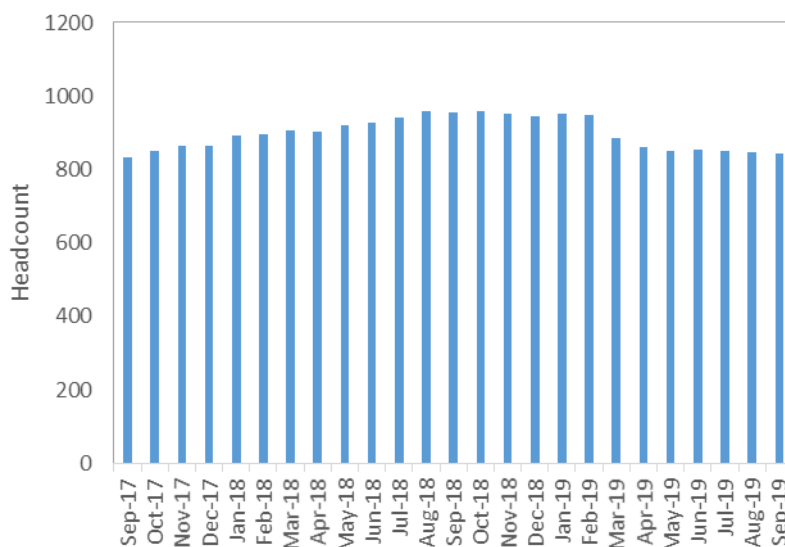
Source: RBC Capital Markets estimates, Thomson Reuters; Company reports

FY20 guidance likely to be unchanged. We expect BlackBerry to reaffirm its guidance for FY20. BlackBerry guided to 23-27% total revenue growth FY20, which implies \$1,127-1,164MM FY20 revenue compared to the Street at \$1,131MM and our estimate for \$1,145MM. Additionally, management expects double-digit percentage increase in billings, 12-16% Y/Y IoT revenue growth, 25-30% Y/Y Cylance growth, -5% Y/Y IP licensing growth, \$10-20MM SAF revenue, and non-GAAP profitability FY20.

Focus on Cylance's growth momentum. Cylance exceeded expectations last quarter, with \$51MM revenue, up 31% Y/Y, above our estimate for \$49MM. Our outlook calls for Cylance revenue to rise 6% Q/Q to \$54MM (est. 30% Y/Y), which assumes modest deceleration compared to Cylance's average of ~8% Q/Q in last 4 quarters as a private company. Data from LinkedIn suggests Cylance's headcount has remained steady (-1%) since Q1/FY20; Cylance's headcount is currently 844, based on data from LinkedIn, which compares to 851 at the end of Q1/FY20 (May 2019). In comparison, Cylance's headcount was 950 in January

2019, which is the last month prior to BlackBerry's acquisition of the company closed on Feb 21, 2019.

Exhibit 3: Cylance's headcount is essentially flat with Q1/FY20



Source: RBC Capital Markets, LinkedIn

As shown in Exhibit 4, the President and founder of Cylance, Stuart McClure, appears to have left the company, based on filings on SEDI. Additionally, BlackBerry removed Stuart McClure from its management web page in September.

Exhibit 4: Stuart McClure is no longer listed as an insider of BlackBerry, according to SEDI

Insider name:		McClure, Stuart Cartier			
Insider's Relationship to Issuer:		7 - Director or Senior Officer of Insider or Subsidiary of Issuer (other than in 4,5,6)			
Ceased to be Insider:		2019-09-03			
Security designation:		Performance Restricted Share Units (Common Shares)			
3344875	2019-02-21	2019-03-28	Direct Ownership :	00 - Opening Balance-Initial SEDI Report	
3344878	2019-03-18	2019-03-28	Direct Ownership :	56 - Grant of rights	+3,122,140
3349474	2019-04-01	2019-04-03	Direct Ownership :	56 - Grant of rights	+77,962
Security designation:		Restricted Share Units (Common Shares)			
3349471	2019-02-21	2019-04-03	Direct Ownership :	00 - Opening Balance-Initial SEDI Report	
3349473	2019-04-01	2019-04-03	Direct Ownership :	56 - Grant of rights	+51,975
Security designation:		Rights (Common Shares)			
3344889	2019-02-21	2019-03-28	Direct Ownership :	00 - Opening Balance-Initial SEDI Report	

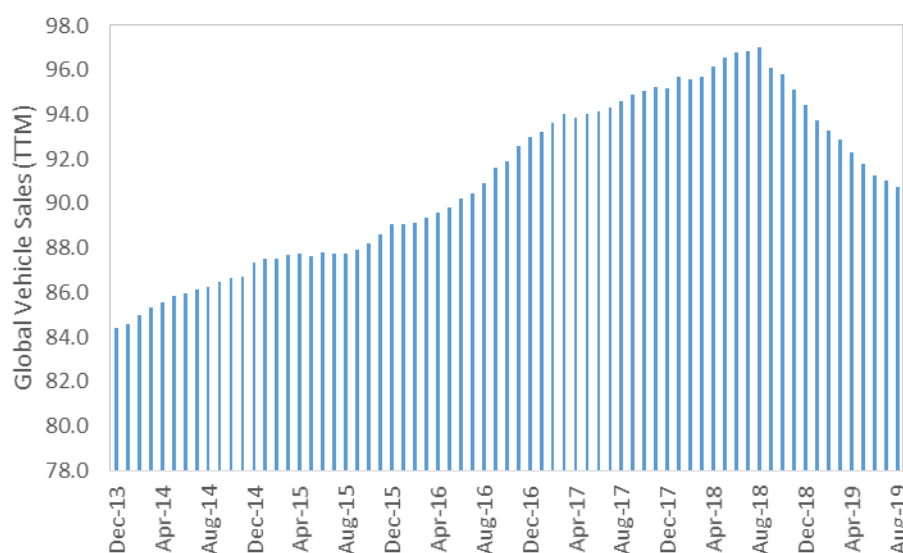
Source: RBC Capital Markets, SEDI

ESS and BTS revenue likely to increase sequentially. We forecast ESS revenue to rise 12% Q/Q on seasonality to \$93MM (up 1% Y/Y); management indicated that it expects ESS revenue to increase on a sequential basis through FY20. Our forecast does not include the large single digit million Secusmart license deal expected to close Q2/Q3; if the large deal closed Q2, upside to our forecast is possible. We expect ESS revenue to be back-end loaded, given historical seasonality. For BTS, we expect revenue to increase 17% Y/Y to \$57MM, up

6% Q/Q, in line with historical seasonality (average of +6% Q/Q last 3 years). BlackBerry announced an expanded partnership with Jaguar Land Rover and the launch of digital instrument clusters at Subaru (2020 Subaru Legacy and Outback to feature a QNX-powered digital cockpit). Combined, we expect IoT revenue (ESS and BTS) to rise 7% Y/Y, which is below management's guidance for 12-16% for FY20e, given back-end loaded seasonality. We expect IP revenue to be flat Y/Y at \$56MM, down from \$72MM Q1, which aligns with management's guidance that IP revenue is likely back-end loaded, with 2H revenue higher than 1H.

Automotive slowdown is a potential headwind to BTS growth. The growth of QNX's revenue primarily reflects the increased software content per vehicle, which stems from more vehicles featuring digital instrument clusters, ADAS (advanced driver assistance systems) and advanced telematics, among other software features. However, reduced global auto sales is a headwind to QNX's growth, given the company's high market share (approx. 40%) of IVI (in-vehicle infotainment) systems. At the end of August, global auto sales declined 6% Y/Y to 90.7MM TTM.

Exhibit 5: Global auto sales decline 6% Y/Y on a TTM basis



Source: RBC Capital Markets, Bloomberg

“Company total” software & services revenue we anticipate to increase 32% Y/Y. As a result of our outlook for ESS, BTS, Cylance, and IP licensing, we expect “company total” software & services revenue to rise 32% Y/Y (5% Y/Y organic) to \$260MM Q2, flat with \$260MM Q1. In comparison, we expect legacy revenue (Handheld Devices, SAF) to decline to 2% of total revenue Q2, flat with Q1 and down from 8% Q2/FY19. For SAF, we expect revenue to decline 62% Y/Y to \$5MM Q2, in line with average decline for the last four quarters (-61% Y/Y). We expect \$0MM Handheld Devices revenue Q2, consistent with the last three quarters and down from \$5MM Q2/FY19.

Expect profitability near breakeven Q2. As a result of a lower mix of high-margin IP licensing revenue, we expect gross margins to decline 400bps Y/Y to 74.0% Q2, down slightly from 74.6% Q1. In regards to opex, we expect total opex to remain similar to Q1 at \$194MM (up 29% Y/Y on Cylance), given stable headcount at Cylance. As a result, we expect adj. EBITDA to decline slightly to \$20MM (7.6% margin) Q2 from \$23MM (8.8% margin) Q1. Operating income is expected near break-even at \$2MM Q2, compared to \$5MM Q1.

Exhibit 6: Lower IP licensing revenue leads to operating income near breakeven Q2

US\$ mm except EPS	Q2/FY20e	Q2/FY19	Y/Y %	Q1/FY20	Q/Q %
Gross Profit	\$196	\$167	17%	\$199	-2%
<i>Gross Margin</i>	<i>74.0%</i>	<i>78.0%</i>		<i>74.6%</i>	
Operating Expenses:					
R&D Expense	\$67	\$48	40%	\$68	-1%
<i>% of Revenue</i>	<i>25%</i>	<i>22%</i>		<i>25%</i>	
SM&A Expense	\$113	\$89	26%	\$112	1%
<i>% of Revenue</i>	<i>43%</i>	<i>42%</i>		<i>42%</i>	
Depreciation & Amortization Expense	\$14	\$13	8%	\$14	0%
<i>% of Revenue</i>	<i>7%</i>	<i>6%</i>		<i>6%</i>	
Total Operating Expense	\$194	\$150	29%	\$194	0%
<i>% of Revenue</i>	<i>75%</i>	<i>70%</i>		<i>74%</i>	
Operating Income	\$2	\$17	-88%	\$5	-62%
<i>Operating margin</i>	<i>0.8%</i>	<i>7.9%</i>		<i>2.0%</i>	
Adj. EBITDA	\$20	\$33	-39%	\$23	-14%
<i>Adj. EBITDA margin</i>	<i>7.6%</i>	<i>15.4%</i>		<i>8.8%</i>	

Source: RBC Capital Markets estimates, Thomson Reuters; Company reports

Expect improved FCF Q2. We expect operating cashflow to rise to \$52MM Q2, up from -\$64MM Q1 following the payout of Cylance related integration and restructuring costs Q1. After \$3MM capex, we expect \$49MM FCF Q2, an improvement from -\$66MM Q1. As a result, we expect net cash to increase to \$402MM (\$0.73/share) Q2 from \$361MM (\$0.65/share) Q1.

Exhibit 7: Expect improved FCF Q2 following Cylance related integration and restructuring payouts Q1

US\$ mm except EPS	Q2/FY20e	Q2/FY19	Y/Y %	Q1/FY20	Q/Q %
Cashflow:					
Net Income	(\$1)	\$43	-103%	(\$35)	n/a
Depreciation & Amortization	\$53	\$38	39%	\$53	0%
Other Items	\$17	(\$49)	n/a	(\$12)	n/a
Changes in Working Capital	(\$17)	(\$3)	79%	(\$70)	n/a
Operating Cashflow	\$52	\$29	n/a	(\$64)	n/a
Less: Capex	(\$3)	(\$4)	n/a	(\$2)	n/a
Free Cashflow	\$49	\$25	95%	(\$66)	n/a
Capital Deployed on Acquisitions	-	-	n/a	(\$2)	n/a
Cash / Debt Positions:					
Cash & Equivalents	\$1,007	\$2,387	-58%	\$966	4%
Borrowings	\$1,409	\$4,167	-66%	\$1,327	6%
Net Cash (Debt)	\$402	\$1,780	-77%	\$361	11%
Net Cash / Share	\$0.73	\$3.31	-78%	\$0.65	11%

Source: RBC Capital Markets estimates, Thomson Reuters; Company reports

Maintain Sector Perform, \$9.00 price target

BlackBerry remains a “show me” story. The investor debate on BlackBerry stems from the company’s future opportunity compared to its current momentum. BTS appears the healthiest, given design win momentum, which may drive stronger growth. For other opportunities like ESS and Radar, limited near-term growth reduces long-term visibility.



Cylance is encouraging, though it is early, and Cylance's lower growth vs. some competitors creates uncertainty.

VMware's acquisition of Carbon Black has positive implications for BlackBerry's sum-of-the-parts valuation. On August 22, VMware (NYSE: VMW) announced that it would acquire Carbon Black (Nasdaq: CBLK) for \$26.00 per share or \$2.1B enterprise value. The takeout values Carbon Black at 8.0x FTM EV/S and 7.3x CY20e EV/S. [See commentary from RBC Capital Markets LLC software analyst Matt Hedberg.](#) Carbon Black is a peer to BlackBerry's Cylance, which BlackBerry acquired in February 2019 for \$1.4B. At the time, BlackBerry indicated that the purchase price was ~7x forward sales. The takeout of Carbon Black at 8.0x FTM EV/S has positive implications for BlackBerry's valuation and may lead to a re-rating of BlackBerry's stock, considering that Cylance and Carbon Black are growing at similar rates (our forecast calls for Cylance's revenue to rise 22% Y/Y in CY20, compared to Street estimates for Carbon Black at 19% CY20 revenue growth). On a sum-of-the-parts basis, we estimate that BlackBerry's current valuation implies that Cylance is valued at 3.9x FTM EV/S, assuming ESS at 3.0x, BTS at 4.5x, and IP licensing at 2.0x. We estimate that every additional multiple point on Cylance's valuation adds \$0.45 to BlackBerry's share price.

Discounted valuation, though growth catalysts needed. Despite the 13% rally in BlackBerry's shares from the August lows (vs. S&P500 +6%), BlackBerry is trading at just 3.3x FTM EV/S, below enterprise security peers at 4.1x and near the low-end of its 2-year historical range (2.7-6.3x). BlackBerry's stock values Cylance at 3.9x FTM EV/S, below peer CrowdStrike at 34x FTM EV/S and the takeout of peer Carbon Black at 8.0x FTM EV/S. In our view, stronger organic growth in several of BlackBerry's core businesses (ESS, BTS, Cylance) is needed to justify higher valuation multiples. Possible catalysts for the stock include new design win announcements, IP licensing upside, upwards valuation re-rating of cybersecurity assets, and accelerating revenue growth at Cylance and BTS.

Maintain \$9.00 price target. Our \$9.00 price target equates to 3.6x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 3.0x CY20e EV/S, BTS (QNX/ Radar) at 4.5x, IP licensing at 2.0x, and Cylance at 5.3x CY20e EV/S, plus \$603MM net cash. For ESS, our target multiple is justified below peers (at 4.1x), given low visibility to long-term growth. For Cylance, we believe our target valuation multiple is justified below cybersecurity peers (at 5.4x) due to limited visibility to sustainable growth. For BTS, we assume a higher target valuation multiple than telematics peers (at 1.9x), given higher growth and mix of software.



Exhibit 8: BlackBerry is trading below enterprise security software peers on an EV/S basis

Company	Ticker	Price	Market	EV	Price/Earnings		EV/EBITDA		EV/Sales		Growth (FTM)		
		19-Sep-19	Cap. (MM)	(MM)	FTM	CY20e	FTM	CY20e	FTM	CY20e	EPS	EBITDA	Rev.
BlackBerry Ltd	BB	\$7.57	\$4,177	\$3,816	67.8x	31.3x	26.1x	17.7x	3.3x	3.1x	-47%	-16%	21%
Enterprise Security Software:													
Cisco Systems Inc	CSCO.O	\$49.19	\$210,779	\$202,032	14.8x	14.3x	10.7x	10.5x	3.8x	3.8x	8%	16%	2%
Qualcomm Inc	QCOM.O	\$78.23	\$96,301	\$98,369	22.9x	16.5x	15.8x	11.9x	4.9x	4.2x	-7%	73%	-3%
VMware Inc	VMW	\$151.69	\$63,147	\$64,507	22.2x	21.0x	16.9x	16.6x	6.1x	5.9x	6%	45%	11%
Citrix Systems Inc	CTXS.O	\$96.45	\$12,951	\$13,130	16.7x	16.0x	12.2x	12.1x	4.3x	4.2x	4%	21%	2%
MobileIron Inc	MOBL.O	\$7.37	\$805	\$705	N/A	N/A	75.0x	53.4x	3.2x	3.0x	N/A	N/A	9%
Absolute Software Corp	ABT.TO	C\$7.87	\$246	\$211	32.2x	27.4x	10.3x	10.1x	2.0x	1.9x	2%	-12%	6%
Enterprise Security Software Average					21.7x	19.0x	23.5x	19.1x	4.1x	3.8x	3%	28%	4%
Telematics:													
Trimble Inc	TRMB.O	\$38.63	\$9,812	\$11,357	18.7x	17.7x	15.1x	14.7x	3.4x	3.3x	6%	19%	3%
ORBCOMM Inc	ORBC.O	\$5.27	\$420	\$614	N/A	N/A	9.0x	8.3x	2.1x	2.0x	N/A	25%	8%
CalAmp Corp	CAMP.O	\$11.15	\$372	\$470	14.4x	11.3x	9.1x	7.9x	1.2x	1.2x	-20%	51%	6%
ID Systems Inc	IDSY.O	\$5.72	\$101	\$93	19.9x	11.8x	7.5x	4.7x	0.8x	0.6x	N/A	N/A	121%
Telematics Average					17.7x	13.6x	10.2x	8.9x	1.9x	1.8x	-7%	32%	34%
Cyber Security Software:													
Palo Alto Networks Inc	PANW.K	\$208.89	\$19,991	\$18,618	41.3x	37.6x	23.9x	21.4x	5.4x	5.0x	-7%	N/A	19%
Symantec Corp	SYMC.O	\$23.98	\$15,395	\$18,159	13.6x	13.0x	10.7x	10.7x	3.7x	3.7x	5%	28%	1%
Check Point Software Technologies Ltd	CHKP.O	\$108.18	\$16,626	\$15,011	17.0x	16.8x	14.5x	14.2x	7.4x	7.2x	10%	12%	4%
Fortinet Inc	FTNT.O	\$78.42	\$13,731	\$11,901	33.8x	31.8x	20.0x	18.1x	5.3x	5.0x	9%	78%	15%
FireEye Inc	FEYE.O	\$14.01	\$2,860	\$2,858	N/A	92.0x	38.3x	24.4x	3.2x	3.1x	5%	N/A	5%
Rapid7 Inc	RPD.O	\$50.98	\$2,470	\$2,404	N/A	N/A	N/A	83.9x	6.8x	6.1x	N/A	N/A	26%
Sophos Group PLC	SOPH.L	\$5.06	\$2,484	\$2,616	26.6x	26.0x	19.5x	18.8x	3.4x	3.2x	249%	59%	7%
Carbon Black Inc	CBLK.O	\$26.00	\$1,882	\$2,100	N/A	N/A	N/A	N/A	8.0x	7.3x	N/A	-50%	14%
Cyber Security Software Average					26.5x	36.2x	21.2x	27.3x	5.4x	5.1x	45%	25%	11%

Note: Estimates for BlackBerry are RBC CM estimates; all other estimates are consensus.

Source: RBC Capital Markets; Thomson Reuters; Company Reports

Exhibit 9: BlackBerry – Financial Estimates

BlackBerry Limited Financial Estimates Yr End Feb 28, \$MM except per share figures	Q1 May-19	2020e Q2e Aug-19	Q3e Nov-19	Q4e Feb-20	Q1e May-20	2021e Q2e Aug-20	Q3e Nov-20	Q4e Feb-21	2018	Years Ended Feb 28 2019	2020e	2021e	2018 - 2021e CAGR
Revenue:													
Enterprise Software & Services (ESS)	83	93	108	108	90	100	116	117	423	367	392	423	0.0%
BlackBerry Technology Solutions (BTS)	54	57	65	67	67	69	77	79	163	204	244	292	21.4%
IoT	137	150	173	175	157	169	193	196	586	571	636	715	6.8%
Licensing	72	56	65	79	72	56	65	79	196	286	272	272	11.5%
BlackBerry Cylance	51	54	57	60	63	66	69	73	0	0	221	271	N/A
Other	7	5	3	2	2	1	1	1	185	59	16	5	-69.4%
Total Revenue	267	265	297	316	293	292	328	349	967	916	1,145	1,263	9.3%
Y/Y %	23.2%	23.8%	30.2%	22.9%	9.5%	10.4%	10.5%	10.5%	-29.6%	-5.2%	25.0%	10.2%	
Q/Q %	4.0%	-0.9%	12.2%	6.3%	-7.3%	-0.1%	12.2%	6.3%					
Cost of Revenue	68	69	75	80	74	73	80	84	246	200	293	312	
Gross Profit	199	196	222	236	218	219	248	265	721	716	853	951	
Gross margin	74.6%	74.0%	74.6%	74.6%	74.6%	75.0%	75.5%	76.0%	74.6%	78.2%	74.5%	75.3%	
Total operating expenses	194	194	206	208	190	188	201	211	643	602	802	790	7.1%
Adj. EBITDA	23	20	33	46	47	49	65	72	161	182	123	233	13.1%
Adj. EBITDA margin	8.8%	7.6%	11.2%	14.5%	16.0%	16.9%	19.7%	20.6%	16.6%	19.8%	10.7%	18.4%	
Depreciation & amortization	35	35	35	35	35	35	35	35	105	77	140	140	
Adj. EBIT	5	2	15	28	29	31	47	54	78	115	51	161	27.3%
Adj. EBIT margin	0	0	0	0	0	0	0	0	0	0	0	0	
Interest income (expense)	3	-4	-3	-3	-3	-2	-2	-1	0	17	-7	-8	
Other expenses	41	0	0	0	0	0	0	0	-328	63	41	0	
Income (loss) before taxes	-33	-1	12	25	26	29	45	53	406	77	3	153	
Taxes	2	0	0	0	0	0	0	0	1	-16	2	0	
Adj. tax rate	-6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	-20.7%	66.1%	0.0%	
GAAP Net Income	-35	-1	12	25	26	29	45	53	405	93	1	153	N/A
Net margin %	-12.9%	-0.5%	4.1%	7.9%	9.0%	9.9%	13.7%	15.1%	41.9%	10.2%	0.1%	12.1%	
Adj. Net Income	5	-1	12	25	26	29	45	53	77	127	42	153	25.7%
Adj. net margin %	2.0%	-0.5%	4.1%	7.9%	9.0%	9.9%	13.7%	15.1%	8.0%	13.8%	3.7%	12.1%	
GAAP EPS	(\$0.06)	(\$0.00)	\$0.02	\$0.04	\$0.05	\$0.05	\$0.08	\$0.09	\$0.76	\$0.17	\$0.00	\$0.28	
Adj. EPS	\$0.01	(\$0.00)	\$0.02	\$0.04	\$0.05	\$0.05	\$0.08	\$0.09	\$0.14	\$0.23	\$0.08	\$0.28	24.2%
Diluted shares outstanding	551.8	552.4	552.9	553.5	554.1	554.6	555.2	555.7	535.9	540.6	552.7	554.9	
Debt & Cashflow:													
Net cash	361	402	504	612	666	748	890	1,020	1,734	428	612	980	
Net cash per share	\$0.65	\$0.73	\$0.91	\$1.11	\$1.20	\$1.35	\$1.60	\$1.84	\$3.24	\$0.79	\$1.11	\$1.77	
Operating cash flow	-64	52	113	119	67	95	155	143	704	100	220	460	N/A
Free cash flow	-66	49	110	116	63	91	151	139	689	84	209	444	N/A
Free cash flow / share	(\$0.12)	\$0.09	\$0.20	\$0.21	\$0.11	\$0.16	\$0.27	\$0.25	\$1.29	\$0.16	\$0.38	\$0.80	N/A

Source: Company Reports, RBC Capital Markets estimates

Valuation

Our \$9.00 price target equates to 3.6x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 3.0x CY20e EV/S, BTS (QNX/Radar) at 4.5x, IP licensing at 2.0x, and Cylance at 5.3x CY20e EV/S, plus \$603MM net cash. Our price target supports our Sector Perform rating.

Risks to rating and price target

Risks to our price target and rating include: a general pullback in technology valuations; market acceptance of its new products; slower-than-expected uptake of new automotive technologies; intensifying competition in the EMM and MDM markets; higher-than-expected legal expenses; opex spending may be higher than expected; new product launches may be later than expected; and BlackBerry may not monetize new services and software.

Company description

BlackBerry is a Waterloo, Ontario-based, developer of enterprise mobility management (EMM) software, embedded operating systems for automotive and other vertical markets, next-generation end-point protection software, telematics and other software for the Enterprise of Things. Founded in 1984, BlackBerry introduced its smartphone brand in 1999, which was the focus of the company until it exited the segment in 2016. BlackBerry acquired Good Technology for \$425MM in November 2015 and Cylance for \$1.4B in February 2019.

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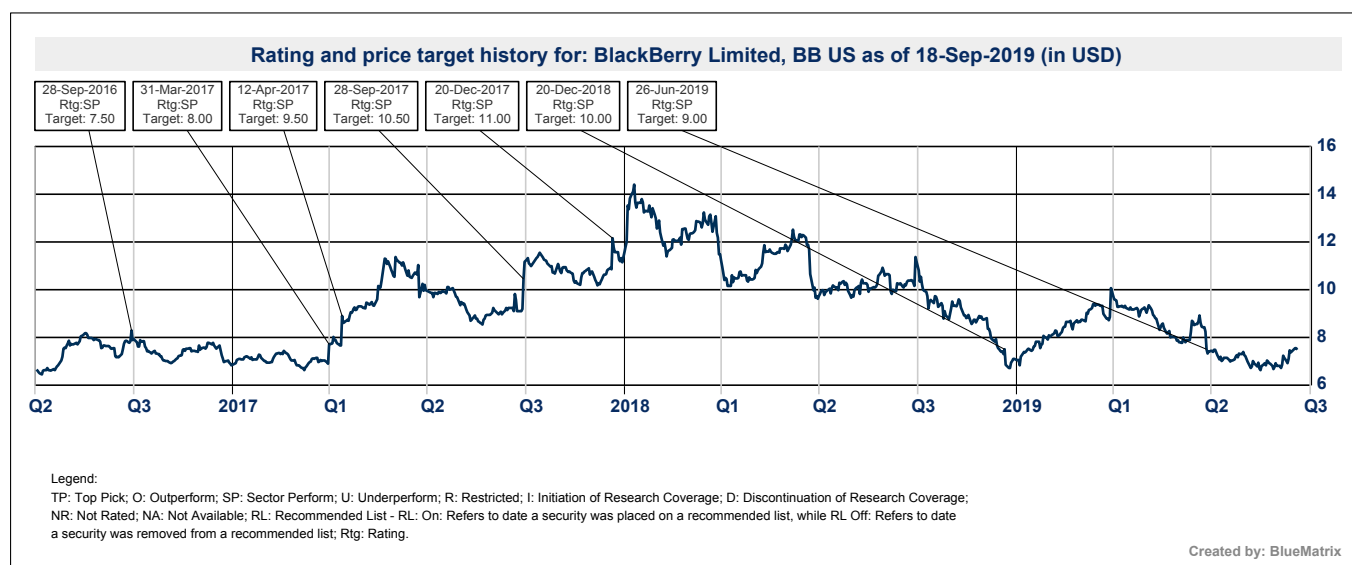
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BlackBerry Limited

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