

RBC Capital Markets

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Sector: Telecom & Networking Equipment

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BlackBerry Limited

Cylance acquisition to amplify short-term volatility

Our view: BlackBerry's shares have declined 14% (vs. S&P500 -3%) since the Cylance acquisition was announced. The decline reflects in part the reduction in BlackBerry's net cash, which removes a key backstop for the stock and is likely to amplify share price volatility. Regarding Q3, we expect results essentially in line with the Street, with upside possible due to the settlement with Nokia. Maintain Sector Perform.

Key points:

- Expect Q3 software & services revenue up 4% Y/Y. BlackBerry is reporting Q3 on December 20. Our outlook calls for total revenue to decline 8% Y/Y to \$216MM, essentially in line with the Street at \$214MM. We expect core software & services revenue to rise 4% Y/Y to \$207MM, which equates to 96% of total revenue. For adj. EPS, we expect \$0.02, matching the Street and down from \$0.04 Q2 on lower gross margins and slightly higher opex.
- Possible settlement with Nokia may lift Q3 revenue. BlackBerry's lawsuit against Nokia was dismissed on November 7 and Nokia confirmed that "the matter has been settled". It's possible that BlackBerry may recognize a portion of the settlement upfront, which could lift Q3 IP licensing revenue above our \$56MM estimate.
- Ramp-up in automotive revenue. Our outlook calls for BTS (QNX/ automotive) revenue to rise 24% Y/Y to \$53MM Q3, up from \$49MM Q2. The ramp in BTS revenue reflects increasing QNX content in 2019 model year vehicles. BTS growth is decelerating from ~30% H1/FY19, given tougher Y/Y comps and limited contribution from BlackBerry Radar.
- Focus on Enterprise Software growth ahead of Cylance close. We expect Enterprise Software revenue to rise 7% Q/Q to \$99MM, given conversion of prior billings (up double digits). Our outlook implies a 7% Y/Y decline in Enterprise Software revenue due to ASC 606 accounting. Investors are likely to focus on the trajectory of BlackBerry's Enterprise Software revenue growth, which when adjusted for ASC 606 experienced low single digits Y/Y growth Q2.
- Cylance expected to amplify short-term volatility. The \$1.4B Cylance acquisition reduces BlackBerry's net cash from \$3.39/share Q3 to an estimated \$0.98/share Q4, or 44% of BlackBerry's share price to 13%. 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.
- Maintain Sector Perform, \$11.00 price target. Our Sector Perform rating reflects limited visibility to BlackBerry's long-term growth. We're rolling forward the basis of our valuation from CY19E to CY20E and introducing our FY21 estimates. Our \$11.00 price target (unchanged) equates to 4.0x CY20E EV/S (previously 4.2x CY19E EV/S) on BlackBerry's software revenue (including Cylance), plus \$843MM pro forma net cash.

Sector Perform

NYSE: BB; USD 7.71; TSX: BB

Price Target USD 11.00

WHAT'S INSIDE	
☐ Rating/Risk Change	☐ Price Target Change
☐ In-Depth Report	☑ Est. Change
☑ Preview	☐ News Analysis

Scenario Analysis*

4	Downside Scenario	Current Price	Price Target	Upside Scenario	
	7.00 ↓ 9%	7.71	11.00 ↑ 43%	14.00 ↑ 82%	_

*Implied Total Returns

Key Statistics

Shares O/S (MM):	537.8	Market Cap (MM):	4,146
Dividend:	0.00	Yield:	0.0%
		Ava Daily Volume:	2 00 / /02

RBC Estimates

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FY Feb	2018A	2019E	2020E	2021E
Revenue	967.0	918.6	1,147.0	1,291.8
EPS, Ops Diluted	0.14	0.14	0.18	0.24
P/E	55.1x	55.1x	42.8x	32.1x
Revenue	Q1	Q2	Q3	Q4
2018	244.0A	249.0A	235.0A	239.0A
2019	217.0A	214.0A	216.4E	271.2E
2020	264.6E	274.5E	287.2E	320.7E
EPS, Ops Diluted				
2018	0.02A	0.05A	0.03A	0.05A
2019	0.03A	0.04A	0.02E	0.04E
2020	0.02E	0.04E	0.05E	0.07E

Target/Upside/Downside Scenarios

Exhibit 1: BlackBerry Limited



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

Target price/base case

Our \$11.00 price target equates to 4.0x CY20E EV/S on BlackBerry's software revenue (including Cylance), plus \$843MM pro forma net cash. Our target valuation multiple is justified slightly above Enterprise Security Software peers given higher organic growth (12% vs. peers at 4%). On a sum-of-the-parts basis, we value BlackBerry's Enterprise Software revenue at 3.9x CY20E EV/S, BTS (QNX/Radar) at 4.2x, IP licensing at 2.1x and Cylance at 6.1x.

Upside scenario

For our upside scenario of \$14.00, we assume faster organic growth of BlackBerry's software business (including enterprise, QNX, IoT, and IP licensing). In this more optimistic scenario, we assume 12% "company total" software & services revenue (excluding Cylance) growth FY20E. Our \$14.00 scenario values BlackBerry's software business at 5.4x on \$1.29B CY20E "company total" software sales.

Downside scenario

For our downside scenario of \$7.00, we assume a slower rate of growth of Enterprise Software. In this more pessimistic scenario, we assume 6% "company total" software & services revenue (excluding Cylance) growth FY20E. Our \$7.00 scenario values BlackBerry's software business at 2.5x on \$1.20B CY20E "company total" software sales.

Investment summary

BlackBerry has successfully transitioned its business away from handsets to enterprise software. Our Sector Perform thesis reflects our view that visibility to future growth is not clear.

- Visibility to future growth 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.
- Cylance expected to amplify short-term volatility. The \$1.4B Cylance acquisition reduces BlackBerry's net cash from \$3.39/share Q3 to an estimated \$0.98/share Q4, or 44% of BlackBerry's share price to 13%. 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.
- Valuation has returned to the low end of BlackBerry's historical range. BlackBerry is trading at 3.7x FTM EV/ S, below its 2-year historical average (4.5x). Additionally, BlackBerry is trading below enterprise security software peers (3.9x) and cybersecurity peers (4.8x), though is above telematics peers (2.2x).

Cylance acquisition to amplify short-term volatility

BlackBerry's shares have declined 14% (vs. S&P500 -3%) since the Cylance acquisition was announced. The decline reflects in part the reduction in BlackBerry's net cash, which removes a key backstop for the stock and is likely to amplify share price volatility. Regarding Q3, we expect results essentially in line with the Street, with upside possible due to the settlement with Nokia. Maintain Sector Perform.

Q3 preview

BlackBerry reporting Q3/FY19 on December 20. BlackBerry is reporting Q3/FY19 (quarter ended November 2018) on Thursday, December 20, before market open. A conference call is scheduled for 8:00 a.m. ET. Dial-in: 866-393-4306. Replay: 800-585-8367; ID#3276343.

Expect Q3 software & services revenue up 4% Y/Y. Our outlook calls for total revenue to decline 8% Y/Y to \$216MM, essentially in line with the Street at \$214MM. We expect core software & services revenue to rise 4% Y/Y to \$207MM, which equates to 96% of total revenue. For adj. EPS, we expect \$0.02, matching the Street and down from \$0.04 Q2 on lower gross margins and slightly higher opex.

Exhibit 2: Excluding unusuals, Q3 revenue and adj. EPS essentially in line with expectations

	Q3/F	Y19E	_			
\$MM, except per share items	RBC	RBC Consensus Q		Y/Y %	Q2/FY19A	Q/Q %
Revenue:						
Enterprise Software & Services	\$99	\$99	\$106	-7%	\$92	7%
BlackBerry Technology Solutions (BTS)	\$53	\$52	\$43	24%	\$49	9%
Licensing, IP and other	\$56	\$56	\$50	11%	\$56	-1%
Handheld Devices	\$0	\$1	\$9	-100%	\$5	-100%
SAF	\$9	\$10	\$27	-67%	\$12	-25%
Total Revenue	\$216	\$214	\$235	-8%	\$214	1%
Gross Profit	\$164	\$160	\$180	-9%	\$167	-2%
Gross Margin	76.0%	74.6%	76.6%		78.0%	
Adj. EBITDA	\$27	\$31	\$35	-23%	\$33	-19%
Adj. EBITDA Margin	12.4%	14.4%	14.9%		15.4%	
Adj. EPS	\$0.02	\$0.02	\$0.03	-22%	\$0.04	-40%

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

Possible settlement with Nokia may lift Q3 revenue. BlackBerry's lawsuit against Nokia was dismissed on November 7, based on disclosures at the US District Court for the District of Delaware. BlackBerry filed patent infringement litigation against Nokia on February 14, 2017. BlackBerry claimed in the lawsuit that Nokia infringed 11 of its patents related to technologies that are essential to implementations of LTE and UMTS/UTRAN standards. Several of the patents were acquired through BlackBerry's involvement in the Rockstar consortium, which purchased the patents from Nortel. According to Bloomberg, Nokia spokesman Mark Durrant said "the matter has now been settled and all actions between the parties are being dismissed". It's possible that BlackBerry may recognize a portion of the settlement upfront, which could lift Q3 IP licensing revenue above our \$56MM estimate (flat Q/Q, up 11% Y/Y).

Ramp-up in automotive revenue. Our outlook calls for BTS (QNX/automotive) revenue to rise 24% Y/Y to \$53MM Q3, up from \$49MM Q2. The ramp in BTS revenue reflects increasing QNX content in 2019 model year vehicles. BTS growth is decelerating from ~30% H1/FY19, given tougher Y/Y comps and limited contribution from BlackBerry Radar.

On October 23, BlackBerry announced that it is expanding its partnership with Renesas to provide an integrated virtualization, functional safety and secure development environment for the Renesas R-Car system-on-a-chip (SoC) devices. The new development environment allows automotive cockpit designers to quickly develop advanced cockpit systems.

Focus on Enterprise Software growth ahead of Cylance close. We expect Enterprise Software revenue to rise 7% Q/Q to \$99MM, given conversion of prior billings (up double digits). Our outlook implies a 7% Y/Y decline in Enterprise Software revenue due to ASC 606 accounting. Investors are likely to focus on the trajectory of BlackBerry's Enterprise Software revenue growth, which when adjusted for ASC 606 experienced low-single-digit Y/Y growth Q2.

BlackBerry likely to reaffirm its FY19E guidance. We believe that BlackBerry is likely to reiterate its prior FY19E guidance for: 1) double-digit software and services billings growth; 2) 8-10% annual software and services revenue growth; 3) positive adj. EPS; and 4) positive FCF (prior to restructuring and legal). We believe that BlackBerry will not adjust its outlook for Cylance, given that Cylance isn't expected to close until late Q4 and likely would not have a material impact on BlackBerry's FY19 financials.

Legacy revenue expected to drop to 4% of total. Our estimates call for legacy revenue (Handheld Device, SAF) to fall to 4% of total revenue Q3, down from 11% Q1 and 8% Q2. For SAF, we expect revenue to decline 25% Q/Q to \$9MM, similar to the average over the last four quarters (24% decline). We expect Handheld Device revenue to decline to \$0MM Q3 from \$5MM Q2.

\$300 258 \$250 218 207 199 197 196 196 193 193 Revenue (\$MM) \$200 172 169 166 156 \$150 104 \$100 36 \$50 21 24 17 Ś0 22/FY17 21/FY18 Q2/FY19 33/FY17 24/FY17 22/FY18 33/FY18 24/FY18 Q1/FY19 33/FY19E Q1/FY17 Legacy (Handheld, SAF) ■ "Company Total" Software & Services

Exhibit 3: Q3 legacy revenue expected to account for less than 5% of total revenue

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

Adj. EBITDA expected to decline on reduced SAF revenue. As a result of reduced highmargin SAF revenue (down \$3MM Q/Q), we expect gross profit to decline to \$164MM Q3, down from \$167MM Q2, implying gross margins declining 200bps Q/Q to 76.0% Q3. Our outlook calls for opex to rise slightly 2% Q/Q to \$154MM (-6% Y/Y). As a result of lower gross profit and higher opex, we expect adj. EBITDA to decline to \$27MM Q3 (12.4% margin), slightly below the Street at \$31MM, and down from \$33MM (15.4% margin) Q2.

\$1.4B Cylance acquisition. BlackBerry announced the \$1.4B acquisition of Cylance on November 16. Management disclosed that the acquisition equates to "less than 7x forward sales" and would be accretive within one year to adj. EPS. BlackBerry is not providing any other additional financial guidance pending the deal close, expected by Q4/FY19 (February 2019). The acquisition of Cylance accelerates the company's long-term strategy to become a secure EoT platform. Cylance's premium valuation (7x sales) points to its strategic value, but requires sustained rapid growth and execution in leveraging long-term opportunities (in enterprise, automotive, and embedded devices) to create long-term shareholder value. Our sensitivity analysis suggests that Cylance needs to achieve >25% revenue CAGR over the next 10 years and >30% EBITDA margins within 5 years to yield a >15% IRR on the acquisition.

Expect healthy operating cashflow. We expect operating cashflow of \$58MM Q3, up from \$29MM Q2. After \$5MM capex, our outlook calls for \$53MM FCF (prior to restructuring and legal) Q3, up from \$25MM Q2. As a result, we expect net cash to increase to \$1.83B Q3 (\$3.39/share), up from \$1.78B Q2 (\$3.31/share). The \$1.4B Cylance acquisition is expected to close Q4. Following the close of the Cylance acquisition, we forecast BlackBerry's net cash to decline to \$531MM (\$0.98/share).

Introducing FY21 estimates

We're introducing FY21 estimates for \$1.3B revenue (+13% Y/Y), \$224MM adj. EBITDA and \$0.24 adj. EPS. Our FY21 outlook assumes 8% Y/Y growth in Enterprise Software revenue, 17% Y/Y growth in BTS revenue, 5% growth in IP licensing revenue, and 35% growth in Cylance revenue. Additionally, we assume gross margins remain flat at 78% and operating margins expand 120bps Y/Y to 10.5% on operating leverage. We've made no change to our FY19 and FY20 estimates.

Exhibit 4: Introducing FY21E estimates

	FY19E	FY20E	FY21E
\$MM, except per share items	Unchanged	Unchanged	New
Revenue:			
Enterprise Software & Services	\$383	\$438	\$473
BlackBerry Technology Solutions (BTS)	\$207	\$249	\$291
Licensing, IP and other	\$255	\$268	\$282
Cylance (acquired)	\$17	\$178	\$240
Handheld Devices	\$13	\$0	\$0
SAF	\$44	\$14	\$6
Total Revenue	\$919	\$1,147	\$1,292
Y/Y Growth	-5%	25%	13%
Gross Profit	\$704	\$891	\$1,005
Gross Margin (%)	76.7%	77.7%	77.8%
Adj. EBITDA	\$131	\$170	\$224
Adj. EBITDA Margin (%)	14.3%	14.8%	17.3%
Adj. EPS	\$0.14	\$0.18	\$0.24

Source: RBC Capital Markets estimates

Maintain Sector Perform, \$11 price target

Maintain Sector Perform recommendation. Our Sector Perform recommendation reflects low visibility to BlackBerry's long-term growth, given the early stage of new opportunities. Possible catalysts for the stock include new design win announcements, IP licensing upside, and potential M&A.

Cylance expected to amplify short-term volatility. The \$1.4B Cylance acquisition reduces BlackBerry's net cash from \$3.39/share Q3 to an estimated \$0.98/share Q4, or 44% of BlackBerry's share price to 13%. 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.

Maintain \$11.00 price target. BlackBerry is trading at 3.7x FTM EV/S, nearly in line with enterprise security software peers at 3.9x. We're rolling forward the basis of our valuation from CY19E to CY20E. Our \$11.00 price target (unchanged) equates to 4.0x CY20E EV/S (previously 4.2x CY19E EV/S) on BlackBerry's software revenue (including Cylance), plus \$843MM pro forma net cash. Our target valuation multiple is justified slightly above Enterprise Security Software peers given higher organic growth (12% vs. peers at 4%). On a sum-of-the-parts basis, we value BlackBerry's Enterprise Software revenue at 3.9x CY20E EV/S, BTS (QNX/Radar) at 4.2x, IP licensing at 2.1x, and Cylance at 6.1x.

Exhibit 5: BlackBerry is trading nearly in line with enterprise security software peers on an EV/S basis

		Price	Market	EV	Price/	Earnings	EV/E	BITDA	EV/S	Sales	G	rowth (FTN	4)
Company	Ticker	13-Dec-18	Cap. (MM)	(MM)	FTM	CY19E	FTM	CY19E	FTM	CY19E	EPS	EBITDA	Rev.
BlackBerry Ltd	BB	\$7.71	\$4,146	\$3,764	60.3x	48.0x	27.4x	23.6x	3.7x	3.4x	-13%	2%	13%
Enterprise Security Software:													
Cisco Systems Inc	CSCO.O	\$47.47	\$219,027	\$201,998	15.3x	15.1x	11.1x	11.0x	3.9x	3.9x	13%	15%	3%
Qualcomm Inc	QCOM.O	\$58.09	\$82,197	\$86,479	15.2x	15.1x	15.0x	13.1x	4.2x	4.0x	12%	31%	-9%
VMware Inc	VMW	\$161.41	\$66,901	\$57,614	25.0x	24.5x	15.4x	15.3x	6.0x	5.9x	7%	44%	10%
Citrix Systems Inc	CTXS.O	\$110.26	\$16,271	\$16,614	18.7x	18.2x	15.4x	15.1x	5.4x	5.4x	5%	16%	4%
MobileIron Inc	MOBL.O	\$4.58	\$476	\$374	N/A	N/A	31.7x	31.7x	1.8x	1.8x	N/A	N/A	11%
Absolute Software Corp	ABT.TO	C\$8.35	\$252	\$217	50.7x	47.4x	14.9x	14.3x	2.2x	2.1x	3%	-17%	6%
Enterprise Security Software Average					25.0x	24.1x	17.3x	16.7x	3.9x	3.8x	8%	18%	4%
Telematics:													
Trimble Inc	TRMB.O	\$34.91	\$8,667	\$10,474	17.2x	16.6x	15.0x	14.9x	3.1x	3.0x	11%	28%	12%
ORBCOMM Inc	ORBC.O	\$8.78	\$691	\$893	N/A	N/A	12.0x	11.3x	2.9x	2.8x	N/A	75%	8%
CalAmp Corp	CAMP.O	\$14.68	\$512	\$476	12.1x	11.8x	8.7x	8.3x	1.2x	1.2x	0%	55%	2%
ID Systems Inc	IDSY.O	\$5.57	\$96	\$85	41.0x	24.2x	30.0x	18.0x	1.5x	1.4x	353%	N/A	8%
Telematics Average					23.4x	17.5x	16.4x	13.1x	2.2x	2.1x	122%	53%	7%
Cyber Security Software:													
Check Point Software Technologies Ltd	CHKP.O	\$108.44	\$17,247	\$15,477	18.3x	17.9x	14.9x	14.8x	7.9x	7.8x	5%	8%	4%
Palo Alto Networks Inc	PANW.K	\$188.13	\$17,647	\$16,067	35.0x	34.0x	20.7x	20.1x	5.5x	5.3x	25%	N/A	21%
Symantec Corp	SYMC.O	\$22.48	\$14,162	\$16,765	13.9x	13.4x	8.7x	8.3x	3.5x	3.4x	-5%	62%	2%
Fortinet Inc	FTNT.O	\$74.51	\$13,091	\$11,457	38.7x	37.5x	22.7x	21.7x	5.8x	5.6x	24%	N/A	16%
FireEye Inc	FEYE.O	\$18.62	\$3,582	\$3,444	N/A	99.0x	41.2x	39.7x	3.9x	3.9x	461%	N/A	7%
Sophos Group PLC	SOPH.L	\$4.60	\$2,286	\$2,420	38.4x	35.4x	12.1x	11.2x	3.2x	3.1x	33%	N/A	10%
Carbon Black Inc	CBLK.O	\$17.59	\$975	\$812	N/A	N/A	N/A	N/A	3.3x	3.2x	N/A	-17%	23%
Cyber Security Software Average					28.9x	27.6x	15.8x	15.2x	4.8x	4.7x	16%	18%	13%

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

Source: RBC Capital Markets; ThomsonONE; Thomson First Call; Company Reports

Exhibit 6: BlackBerry – Financial Estimates

Financial Estimates Yr End Feb 28, \$MM except per share figures Revenue: Enterprise Software & Services BlackBerry Technology Solutions (BTS) Licensing, IP & Other Cylance (acquired)	Q1 May-18 83.0 47.0 63.0	Q2 Aug-18 92.0 49.0	Q3e Nov-18	Q4e Feb-19	Q1e May-19	Q2e Aug-19	Q3e Nov-19	Q4e	Q1e	Q2e	Q3e	Q4e	2018	2019e	2020e	2021e	2021e CAGI
Revenue: Enterprise Software & Services BlackBerry Technology Solutions (BTS) Licensing, IP & Other	83.0 47.0 63.0	92.0		Feb-19	May-19	Aug-19	Nov-19	F . I. 20	14: 20								
Enterprise Software & Services BlackBerry Technology Solutions (BTS) Licensing, IP & Other	47.0 63.0		00.6					Feb-20	May-20	Aug-20	Nov-20	Feb-21					
Enterprise Software & Services BlackBerry Technology Solutions (BTS) Licensing, IP & Other	47.0 63.0		00.6														
BlackBerry Technology Solutions (BTS) Licensing, IP & Other	47.0 63.0		00.0														
Licensing, IP & Other	63.0	49 N	98.6	109.4	99.6	105.8	112.4	120.4	107.6	114.3	121.4	130.0	423.0	383.0	438.2	473.2	3.8%
3.		45.0	53.3	57.5	58.5	59.8	62.7	67.6	69.0	70.2	73.3	78.4	163.0	206.8	248.5	291.0	21.3%
Cylance (acquired)		56.0	55.5	80.0	63.0	62.7	62.7	80.0	66.2	65.9	65.9	84.0	196.0	254.5	268.5	281.9	12.9%
	0.0	0.0	0.0	17.4	38.5	42.4	46.6	50.6	54.6	58.5	62.0	64.8	0.0	17.4	178.0	239.8	N/A
Handheld Devices	8.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	13.0	0.0	0.0	N/A
SAF	16.0	12.0	9.0	6.8	5.1	3.8	2.8	2.1	1.7	1.5	1.4	1.2	121.0	43.8	13.8	5.9	-63.5%
Total Revenue	217.0	214.0	216.4	271.2	264.6	274.5	287.2	320.7	299.1	310.4	323.9	358.4	967.0	918.6	1,147.0	1,291.8	10.1%
Y/Y %	-11.1%	-14.1%	-7.9%	13.5%	22.0%	28.3%	32.7%	18.3%	13.0%	13.1%	12.8%	11.8%	-29.6%	-5.0%	24.9%	12.6%	
Q/Q%	-9.2%	-1.4%	1.1%	25.3%	-2.4%	3.7%	4.6%	11.7%	-6.7%	3.8%	4.4%	10.7%					
•																	
Cost of Revenue	51.0	47.0	51.9	60.9	52.0	53.4	54.1	60.8	56.2	57.9	58.9	66.1	246.0	210.8	220.3	239.2	
Gross Profit	166.0	167.0	164.5	206.8	204.9	212.6	223.7	249.8	231.9	240.7	252.5	279.4	721.0	704.3	891.1	1,004.6	
Gross margin	76.5%	78.0%	76.0%	76.3%	77.4%	77.5%	77.9%	77.9%	77.5%	77.6%	78.0%	78.0%	74.6%	76.7%	77.7%	77.8%	
Total operating expenses	154.0	150.0	153.7	166.5	155.5	154.6	158.6	169.7	168.0	167.7	172.5	184.3	643.0	624.2	638.3	692.5	2.5%
Adj. EBITDA	31.0	33.0	26.8	40.6	31.8	38.0	43.9	56.4	44.1	51.5	57.2	70.8	161.0	131.4	170.1	223.6	11.6%
Adj. EBITDA margin	14.3%	15.4%	12.4%	15.0%	12.0%	13.9%	15.3%	17.6%	14.8%	16.6%	17.7%	19.7%	16.6%	14.3%	14.8%	17.3%	11.070
Depreciation & amortization	23.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	27.0	27.0	27.0	27.0	105.0	83.0	80.0	108.0	
Adj. EBIT	12.0	17.0	10.8	24.6	15.8	22.0	27.9	40.4	27.0	29.5	35.2	48.8	78.0	64.4	106.1	135.6	20.2%
•	5.5%	7.9%	5.0%	9.1%	6.0%	8.0%	9.7%	12.6%	7.4%	9.5%	10.9%	13.6%	8.1%	7.0%	9.3%	10.5%	20.2%
Adj. EBIT margin	6.0	5.0		-0.5	-2.9		9.7% -2.4	-2.0	-1.7			-0.6	0.0	12.3	9.5% -9.9		
Interest income (expense)			1.8		_	-2.6				-1.4	-1.1					-4.8	
Other expenses	77.0	-22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-328.0	55.0	0.0	0.0	
Income (loss) before taxes	-59.0	44.0	12.6	24.1	12.9	19.4	25.5	38.4	20.5	28.1	34.1	48.1	406.0	21.7	96.2	130.8	
Taxes	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	
Adj.tax rate	-1.7%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	9.2%	0.0%	0.0%	
GAAP Net Income	-60.0	43.0	12.6	24.1	12.9	19.4	25.5	38.4	20.5	28.1	34.1	48.1	405.0	19.7	96.2	130.8	N/A
Net margin %	-27.6%	20.1%	5.8%	8.9%	4.9%	7.1%	8.9%	12.0%	6.8%	9.1%	10.5%	13.4%	41.9%	2.1%	8.4%	10.1%	†
Adj. Net Income	17.0	21.0	12.6	24.1	12.9	19.4	25.5	38.4	20.5	28.1	34.1	48.1	77.0	74.7	96.2	130.8	19.3%
Adj. net margin %	7.8%	9.8%	5.8%	8.9%	4.9%	7.1%	8.9%	12.0%	6.8%	9.1%	10.5%	13.4%	8.0%	8.1%	8.4%	10.1%	
GAAP EPS	(\$0.11)	\$0.08	\$0.02	\$0.04	\$0.02	\$0.04	\$0.05	\$0.07	\$0.04	\$0.05	\$0.06	\$0.09	\$0.76	\$0.04	\$0.18	\$0.24	
Adj. EPS	\$0.03	\$0.04	\$0.02	\$0.04	\$0.02	\$0.04	\$0.05	\$0.07	\$0.04	\$0.05	\$0.06	\$0.09	\$0.14	\$0.14	\$0.18	\$0.24	18.9%
Diluted shares outstanding	537.0	537.8	538.3	538.8	539.4	539.9	540.5	541.0	541.5	542.1	542.6	543.2	535.9	538.0	540.2	542.4	
Debt & Cashflow:																	
Net cash	1,760.0	1,780.0	1,825.4	530.7	573.7	643.8	719.1	840.8	899.8	985.2	1,074.6	1,212.9	1,734.0	530.7	840.8	1,078.9	
Net cash per share	\$3.28	\$3.31	\$3.39	\$0.98	\$1.06	\$1.19	\$1.33	\$1.55	\$1.66	\$1.82	\$1.98	\$2.23	\$3.24	\$0.99	\$1.56	\$1.99	
Operating cash flow	-7.0	29.0	58.4	118.3	56.0	83.1	88.2	134.8	74.0	100.4	104.5	153.2	704.0	198.7	362.1	432.1	N/A
Free cash flow	-7.0	25.0	53.4	113.3	51.0	78.1	83.2	129.8	68.0	94.4	98.5	147.2	689.0	179.7	342.1	432.1	N/A N/A
Free cash flow / share	-12.0 (\$0.02)	\$0.05	\$0.10	\$0.21	\$0.09	/8.1 \$0.14	\$3.2 \$0.15	129.8 \$0.24	\$0.13	\$0.17	98.5 \$0.18	\$0.27	\$1.29	\$0.33	\$0.63	408.1 \$0.75	N/A N/A

Source: Company Reports, RBC Capital Markets estimates

Valuation

Our \$11.00 price target equates to 4.0x CY20E EV/S on BlackBerry's software revenue (including Cylance), plus \$843MM pro forma net cash. Our target valuation multiple is justified slightly above Enterprise Security Software peers given higher organic growth (12% vs. peers at 4%). On a sum-of-the-parts basis, we value BlackBerry's Enterprise Software revenue at 3.9x CY20E EV/S, BTS (QNX/Radar) at 4.2x, IP licensing at 2.1x, and Cylance at 6.1x. 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, smartphones and related software and services. Founded in 1984, BlackBerry introduced its smartphone brand in 1999, which has been the focus of the company for more than a decade. BlackBerry is shifting its business model toward enterprise solutions and services, and it acquired Good Technology for \$425MM in November 2015.



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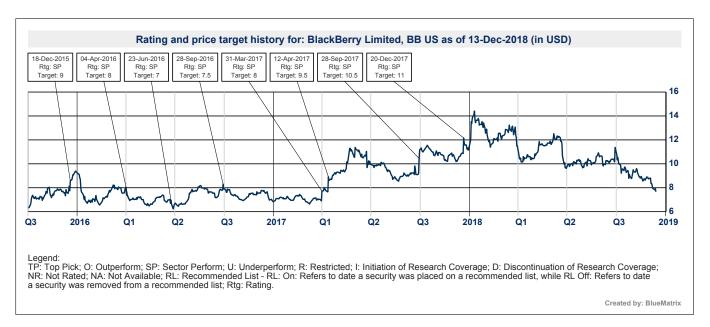
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BlackBerry Limited

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