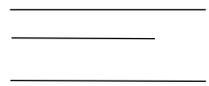


BlackBerry

\$BB: 9.18_{USD}

.16 (.33%)



OUTLINE



 OUTLINE

 INVESTMENT THESIS

 COMPANY OVERVIEW

 COMPETITIVE OVERVIEW

 FINANCIAL OVERVIEW

 RISK OVERVIEW

 RECOMMENDATION



OUTLINE



INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



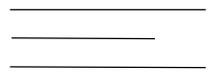
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



INVESTMENT THESIS



OUTLINE



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COMPANY OVERVIEW



COMPETITIVE OVERVIEW



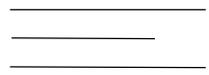
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



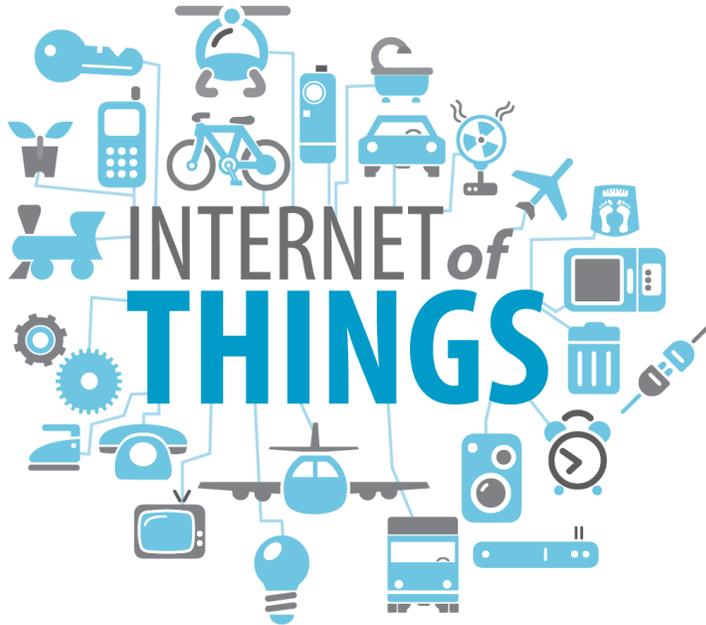
COMPANY OVERVIEW



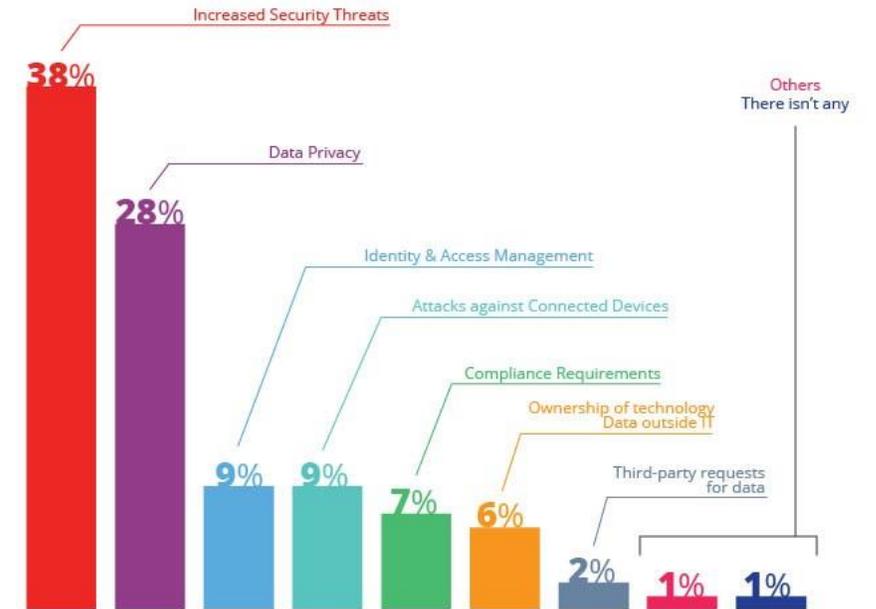
Industry Overview

“By 2025 IOT applications could have **\$11T** impact”
- McKinsey Global

80% of consumers don't trust IoT security



TOP GOVERNANCE ISSUES WITH THE INTERNET OF THINGS



Data Source: ISACA's Risks and Rewards of the Internet of Things



OUTLINE



INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



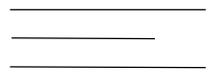
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



COMPANY OVERVIEW

Product Portfolio

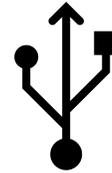


Enterprise Software & Services

#1 in BYOD Management (Garter)

Secure communication platforms

New IOT platform, BB Spark



Business Technology Solutions

QNX (#1 automotive dev. platform)

Blackberry Jarvis

Blackberry Radar



Licensing and IP

37,500 patents

Licensing handset technology

BBM Consumer (winner in Indonesia)



OUTLINE



INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



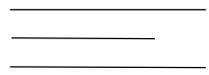
FINANCIAL OVERVIEW



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RECOMMENDATION



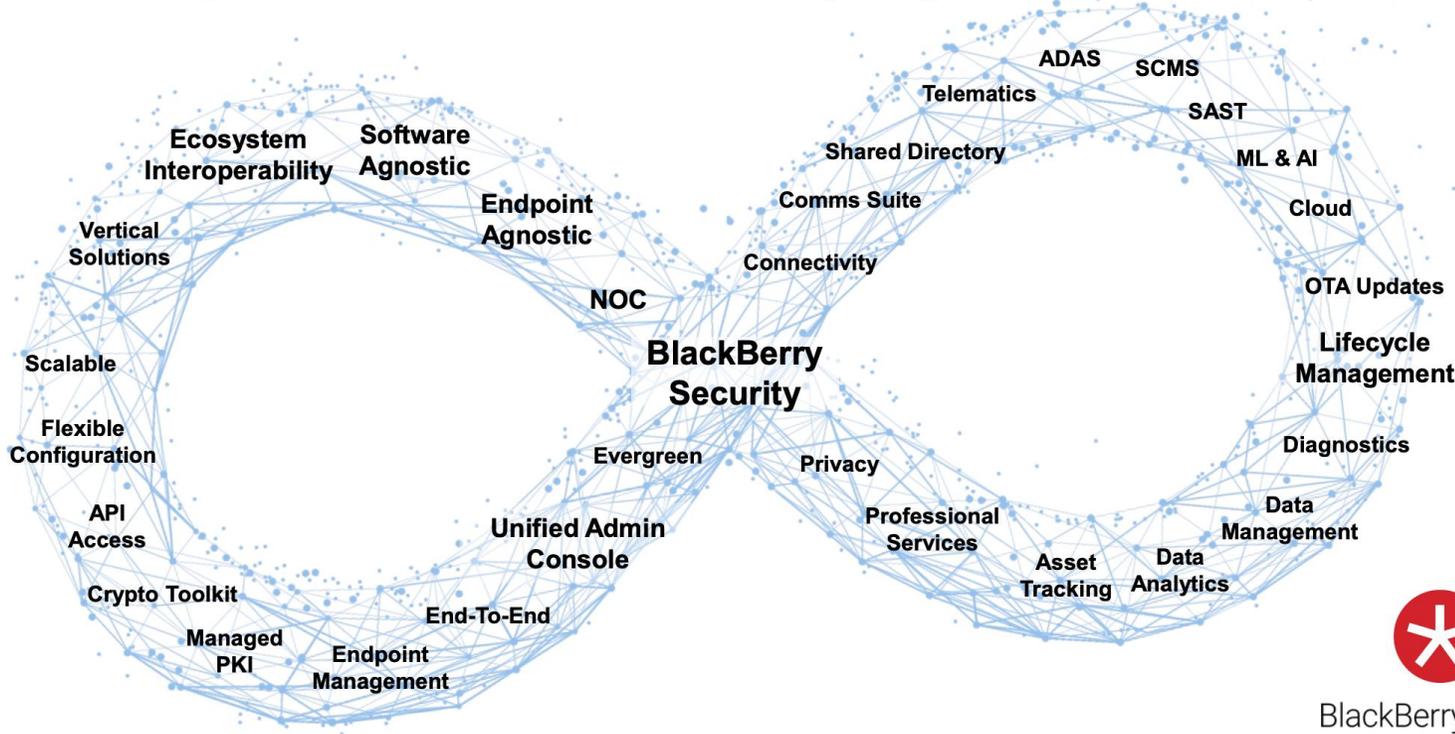
COMPANY OVERVIEW



The New BlackBerry

BLACKBERRY SPARK

One seamless platform for the Internet of Everything



BlackBerry Spark

Regulated End Markets

1. Healthcare
2. Automotive
3. Governments
4. Financial Services

2019 TAM: \$17.6 B



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INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



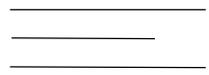
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



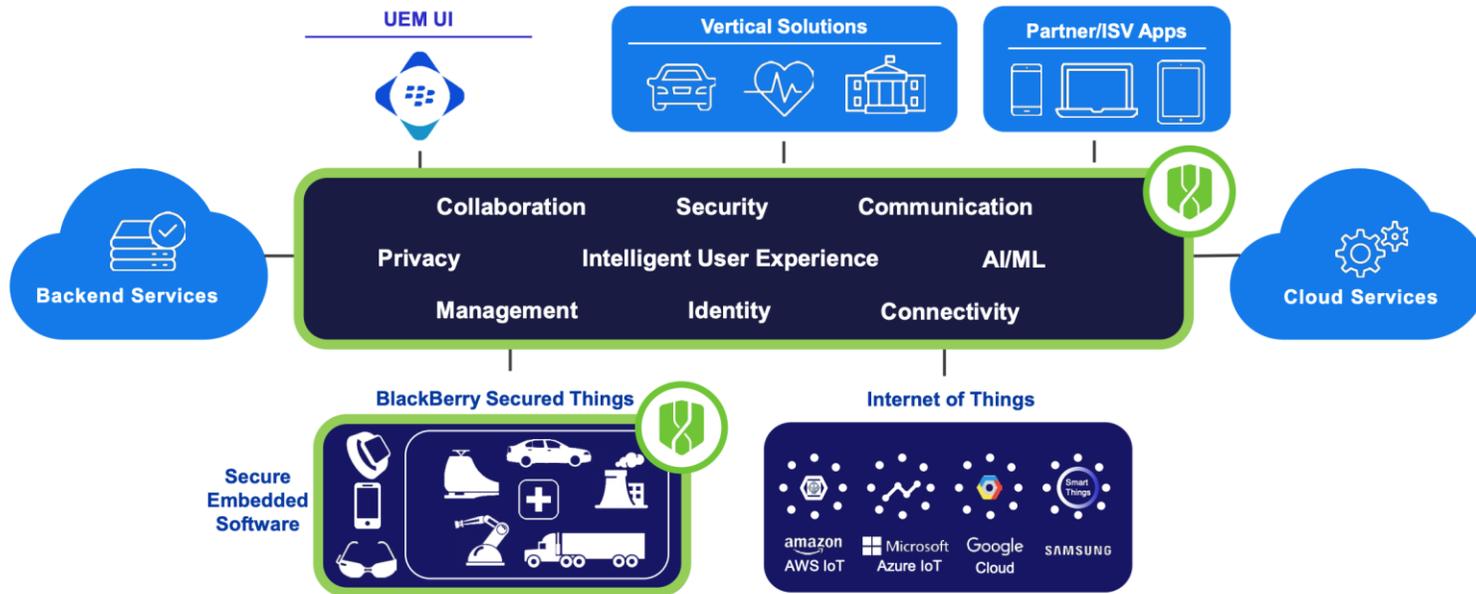
COMPANY OVERVIEW

Cylance Acquisition



BlackBerry Spark

Technology from **Cylance** will be leveraged in critical areas of our Spark Platform



About Cylance

1. Bought for \$1.4B (all cash)
2. Cybersecurity Unicorn
3. Adds 800+ trained talent
4. Record-breaking growth

2019 Revenue: **\$154M**



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FINANCIAL OVERVIEW

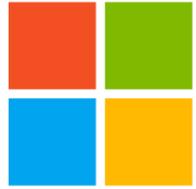


RISK OVERVIEW



RECOMMENDATION

COMPETITIVE OVERVIEW



Microsoft

- Bundled UEM offering with Microsoft Office



vmware

- Winner in UEM
- Focus on edge computing and data-center

CITRIX[®]

- Network breached by international cyber-criminals 12 hours ago



OUTLINE



INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



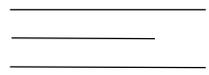
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



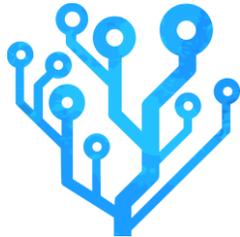
COMPETITIVE OVERVIEW



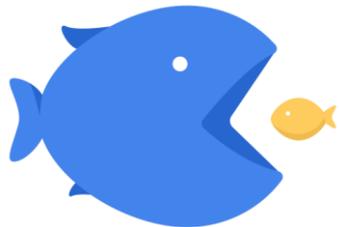
Blackberry's Competitive Advantages



Top of the line security, great for niche markets



Strong channel partners and device support



Inorganic growth & market penetration strategy



OUTLINE



INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



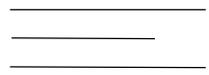
FINANCIAL OVERVIEW



RISK OVERVIEW



RECOMMENDATION



FINANCIAL OVERVIEW



Ratio Analysis

Company Comp Set							
Company Name	EV/Revenue LTM - Latest	EV/EBITDA LTM - Latest	EV/EBIT LTM - Latest	P/Diluted EPS Before Extra LTM - Latest	P/TangBV LTM - Latest	NTM TEV/Forward EBITDA	
Sierra Wireless, Inc. (TSX:SW)	0.5x	10.5x	NM	NM	3.0x	10.74x	
VMware, Inc. (NYSE:VMW)	8.1x	26.0x	33.7x	29.5x	NM	18.53x	
Lenovo Group Limited	0.3x	6.7x	10.1x	21.5x	NM	6.48x	
Varonis Systems, Inc.	6.0x	NM	NM	NM	14.2x	165.29x	
Celestica Inc. (TSX:CLS)	0.2x	6.1x	9.3x	12.9x	1.4x	5.68x	
Citrix Systems, Inc.	4.9x	17.3x	20.8x	26.5x	NM	13.16x	
Microsoft Corporation	6.9x	16.4x	21.0x	25.9x	20.4x	14.68x	
BlackBerry Limited (TSX:BB)	3.6x	40.9x	NM	NM	3.1x	16.43x	
Summary Statistics	TEV/Total Revenues LTM - Latest	TEV/EBITDA LTM - Latest	TEV/EBIT LTM - Latest	P/Diluted EPS Before Extra LTM - Latest	P/TangBV LTM - Latest	NTM TEV/Forward EBITDA (Capital IQ)	
High	8.1x	26.0x	33.7x	29.5x	20.4x	165.29x	
Low	0.2x	6.1x	9.3x	12.9x	1.4x	5.68x	
Mean	3.8x	13.4x	17.9x	21.8x	9.2x	30.77x	
Median	4.1x	10.8x	16.7x	23.7x	7.0x	12.36x	



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INVESTMENT THESIS



COMPANY OVERVIEW



COMPETITIVE OVERVIEW



FINANCIAL OVERVIEW



RISK OVERVIEW



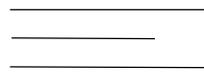
RECOMMENDATION

FINANCIAL OVERVIEW Revenue Projections



BB Revenue	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	weight	BB Margins	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ESS Segment							ESS Segment					
UEM/EMM	300	345	397	456	525	79%	COGS	95	109	100	103	98
Spark	42	50	60	73	87	11%	S&M	152	174	199	229	262
Athoc	25	26	27	27	28	4%	R&D	95	109	125	143	164
Secusmart	14	14	15	15	16	4%	Other					
Total:	381	436	499	571	656		Total:	\$ 342.90	\$ 392.01	\$ 423.81	\$ 474.31	\$ 524.55
% Growth:		14%	14%	15%	15%		% Margin:	10%	10%	15%	17%	20%
BTS Segment							BTS Segment					
QNX Platform	195	249.6	324.48	405.6	486.72	95%	COGS	62	83	90	99	107
BB Radar	5	20	30	35	40	2%	S&M	88	118	155	193	231
RF Tuning	5	6	7	8	9	2%	R&D	43	58	76	94	113
Total:	205	275	361	449	536		Other					
% Growth:		34%	31%	24%	20%		Total:	\$ 192.70	\$ 258.92	\$ 321.58	\$ 385.80	\$ 450.32
LIP Segment							% Margin:	6%	6%	12%	16%	19%
BBM Consumer	85	100	115	128	137	43%	LIP Segment					
Mobile Liscensing	14	14	15	11	8	7%	COGS	13	15	18	20	22
IP Liscensing	160	192	230.4	265	305	80%	OPEX	104	123	144	162	180
Total:	259	307	361	404	450		Total:	\$ 116.55	\$ 138.02	\$ 162.27	\$ 181.70	\$ 202.36
% Growth:		18%	18%	12%	11%		% Margin:	55%	55%	55%	55%	55%
Cylance							Cylance					
	154	208	281	379	512		COGS	50	67	91	123	165
% Growth:	35%	35%	35%	35%	35%	100%	OPEX	89	120	162	219	295
Total Revenue:	\$ 999	\$ 1,226	\$ 1,501	\$ 1,803	\$ 2,153		Total:	\$ 138.66	\$ 187.19	\$ 252.71	\$ 341.16	\$ 460.57
% Growth:		23%	22%	20%	19%		% Margin:	10%	10%	10%	10%	10%
							Amortization:	\$ 159.84	\$ 196.10	\$ 240.19	\$ 288.44	\$ 344.48
							Operating Profit:	\$ 48.35	\$ 53.38	\$ 100.63	\$ 131.33	\$ 170.71
Churn Rate:	0.06			0.22			EPS:	\$ 0.09	\$ 0.10	\$ 0.19	\$ 0.24	\$ 0.32
COGS	75						% Growth:		10%	88%	31%	30%





FINANCIAL OVERVIEW

Projected Income Statement



Income Statement

For the Fiscal Period Ending	12 months Mar-01-2014	Reclassified 12 months Feb-28-2015	Reclassified 12 months Feb-29-2016	12 months Feb-28-2017	12 months Feb-28-2018	12 months Feb-28-2019 PRO FORMA	12 months Feb-28-2020 PRO FORMA	12 months Feb-28-2021 PRO FORMA	12 months Feb-28-2022 PRO FORMA	12 months Feb-28-2023 PRO FORMA
Currency	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
Revenue	6,813.0	3,335.0	2,160.0	1,309.0	932.0	999.0	1,228.8	1,499.1	1,798.9	2,140.7
Other Revenue	-	-	-	-	-	-	-	-	-	-
Total Revenue	6,813.0	3,335.0	2,160.0	1,309.0	932.0	999.0	1,228.8	1,499.1	1,798.9	2,140.7
Cost Of Goods Sold	6,753.0	1,708.0	1,219.0	667.0	251.0	220.0	274	299	345	392
Gross Profit	60.0	1,627.0	941.0	642.0	681.0	779.0	954.8	1,200.1	1,453.9	1,748.7
Selling General & Admin Exp.	1,770.0	540.0	653.0	306.0	381.0	240.0	292	354	422	493
R & D Exp.	1,210.0	641.0	469.0	302.0	234.0	138.0	167	201	237	277
Depreciation & Amort.	-	-	-	-	-	(56.1)	(69.0)	(84.2)	(101.1)	(120.3)
Amort. of Goodwill and Intangibles	606.0	298.0	277.0	186.0	153.0	159.8	196.1	240.19	288.44	344.48
Other Operating Expense/(Income)	-	-	-	-	-	192.0	243	306	381	475
Other Operating Exp., Total	3,586.0	1,479.0	1,399.0	794.0	768.0	729.8	898.1	1,101.2	1,328.4	1,589.5
Operating Income	(3,526.0)	148.0	(458.0)	(152.0)	(87.0)	49.2	56.7	98.9	125.5	159.2
Interest Expense	(21.0)	(75.0)	(75.0)	(48.0)	(23.0)	(29.6)	(36.4)	(44.4)	(53.3)	(63.4)
Interest and Invest. Income	-	113.0	16.0	21.0	146.0	53.4	65.7	80.2	96.2	114.5
Net Interest Exp.	(21.0)	38.0	(59.0)	(27.0)	123.0	23.8	29.3	35.8	42.9	51.1
Other Non-Operating Inc. (Exp.)	-	-	-	-	-	-	-	-	-	-
EBT Excl. Unusual Items	(3,547.0)	186.0	(517.0)	(179.0)	36.0	25.3	27.4	63.1	82.6	108.2
Restructuring Charges	(512.0)	(322.0)	-	(257.0)	(78.0)	(9.0)	(3.2)	-	-	-
Merger & Related Restruct. Charges	-	-	-	(19.0)	(14.0)	(14.0)	(14.0)	(14.0)	(14.0)	(14.0)
Impairment of Goodwill	-	-	-	(57.0)	-	-	-	-	-	-
Gain (Loss) On Sale Of Assets	-	(169.0)	(195.0)	(171.0)	(9.0)	(3.0)	-	-	-	-
Asset Writedown	(2,748.0)	-	-	(501.0)	(11.0)	-	-	-	-	-
Legal Settlements	-	-	-	-	(10.0)	(2.7)	(3.3)	(4.0)	(4.8)	(5.7)
Other Unusual Items	(377.0)	(80.0)	430.0	(24.0)	492.0	-	-	-	-	-
EBT Incl. Unusual Items	(7,184.0)	(385.0)	(282.0)	(1,208.0)	406.0	(3.35)	6.86	49.15	63.74	88.42
Income Tax Expense	(1,311.0)	(81.0)	(74.0)	(2.0)	1.0	(0.9)	1.8	12.8	16.6	23.0
Earnings from Cont. Ops.	(5,873.0)	(304.0)	(208.0)	(1,206.0)	405.0	(2.5)	5.1	36.4	47.2	65.4
Earnings of Discontinued Ops.	-	-	-	-	-	-	-	-	-	-
Extraord. Item & Account. Change	-	-	-	-	-	-	-	-	-	-
Net Income to Company	(5,873.0)	(304.0)	(208.0)	(1,206.0)	405.0	(2.5)	5.1	36.4	47.2	65.4
Minority Int. in Earnings	-	-	-	-	-	-	-	-	-	-
Net Income	(5,873.0)	(304.0)	(208.0)	(1,206.0)	405.0	(2.5)	5.1	36.4	47.2	65.4



OUTLINE

INVESTMENT THESIS

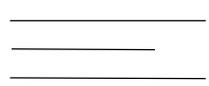
COMPANY OVERVIEW

COMPETITIVE OVERVIEW

FINANCIAL OVERVIEW

RISK OVERVIEW

RECOMMENDATION



FINANCIAL OVERVIEW



Revenue Growth					7%	23%	22%	20%	19%
DCF	Historical				Forward				
year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	3335	2160	1309	932	999	1228.77	1499.10	1798.92	2140.71
CoGS	1708	1219	667	251	220	274	299	345	392
Gross Margin	1627	941	642	681	779	954.77	1200.10	1453.92	1748.71
Op Ex	1181	1181	1122	608	615	378	459	555	659
D&A	298	277	186	153	103.71	127.06	155.96	187.37	224.20
EBIT	148	-517	-666	-80	60.29	449.71	585.14	711.55	865.51
Tax Rate	26%	26%	26%	26%	26%	26%	26%	26%	26%
Op. Taxes	38.48	-134.42	-173.16	-20.8	15.68	116.92	152.14	185.00	225.03
NOPAT	109.52	-382.58	-492.84	-59.2	44.61	332.79	433.00	526.55	640.48
ΔNWC	-147	-309	123	107	-49.52	-60.94	-70.29	-72.71	-82.95
CapEx	-987	-172	-471	-116	-258.94	206.58	242.99	269.51	307.26
Unl. FCF	1243.52	98.42	-144.84	-50.2	353.07	187.14	260.30	329.75	416.16
Discounted FCF					\$317.24	\$151.08	\$188.82	\$214.93	\$243.72

WACC:	11.29%
KD	2%
KE	13%
% Debt	12%
% Equity	88%

Terminal Value	
g	3.5%
CF0	416.1576547
WACC	11%
TV:	5525.917592

PVFCF	\$6,641.71
Non Op. Assets	\$ 1,168.00
Enterprise Value	\$7,809.71
Financial Debt	\$ 811.00
Equity Value	\$6,998.71
Shares out.	538.00
Target Price	\$ 13.01
Current Price	\$ 9.18
Discount	29%

Sensitivity Analysis									
\$	13.01	8.00%	9.00%	10.00%	11.29%	12.00%	13.00%	14.00%	WACC
2.50%	\$ 17.35	\$ 15.07	\$ 13.38	\$ 11.75	\$ 11.05	\$ 10.20	\$ 9.49		
2.75%	\$ 18.07	\$ 15.59	\$ 13.77	\$ 12.04	\$ 11.29	\$ 10.40	\$ 9.66		
3.00%	\$ 18.87	\$ 16.15	\$ 14.19	\$ 12.34	\$ 11.55	\$ 10.62	\$ 9.84		
3.50%	\$ 20.72	\$ 17.43	\$ 15.13	\$ 13.01	\$ 12.12	\$ 11.08	\$ 10.22		
3.75%	\$ 21.81	\$ 18.16	\$ 15.65	\$ 13.37	\$ 12.43	\$ 11.32	\$ 10.43		
4.00%	\$ 23.04	\$ 18.96	\$ 16.22	\$ 13.77	\$ 12.76	\$ 11.59	\$ 10.64		

Price Target: \$13.01



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RISK OVERVIEW



RECOMMENDATION



Losing UEM market share to low-cost competitors

- Microsoft grew market share 98% through lower costs and bundling tactics
- Blackberry can't grow margins while undercutting large-cap players
- Other players could lower prices in the future, taking more market share



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RECOMMENDATION



Mitigation: Losing UEM market share to low-cost competitors

- Microsoft has limited device support beyond Windows, so they can't take much more share
- Blackberry has competitive advantages, especially in regulated industries
- Cylance acquisition will strengthen UEM offerings
- Blackberry could lose UEM and still make up for it with growth in other parts of their business



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RECOMMENDATION



Poor marketing efforts

- “Magic Number” is below .75 (Magic Number = change in revenue/marketing spending)
- No truly effective marketing campaign, you probably thought they were still making phones



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RECOMMENDATION



Poor marketing efforts

- Marketing team had to transition from selling phones to enterprise software
- Budget was cut for years as the firm focused on its new product portfolio, that process is finished
- Blackberry gains share through inorganic growth and a strong network of channel partners



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RECOMMENDATION



Slow growth in IOT market/IOT end markets

- Recession could slow demand for new IT investments in firms of all sizes
- A recession could favor price-skimming strategies
- The IOT might not be adopted as fast as predicted due to security/interoperability concerns



OUTLINE



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RECOMMENDATION



Slow growth in IOT market/IOT end markets

- Blackberry is geographically diversified, less prone to idiosyncratic risks
- There will be steady demand for cybersecurity even in a recession, especially in targeted segments
- Blackberry's products are designed to facilitate IOT adoption, creating a virtuous cycle



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RECOMMENDATION

RECOMMENDATION



From our qualitative analysis and quantitative valuation on \$BB, as well as its competitors and overall industry, we recommend a long on \$BB.



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