

SECTOR SPOTLIGHT- TECHNOLOGY COMPUTER CRASH?

JUNE 27, 2017

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PLEASE SUBMIT QUESTIONS* TO

QA@HEDGEYE.COM

HEDGEYE TECH SECTOR

ACTIVES

GLW- Corning Incorprated

MSCC- Microsemi Corporation KEYS- Keysight Technologies

Recently Actives

MU- Micron Technology

INTC- Intel Corporation AVGO- Broadcom Ltd SABR- Sabre Corporation

Under Construction

AKAM- Akamai Technologies NOK- Nokia Oyj

Background in Tech:

- Networking equipment since 2001
- Semiconductors since 2003
- Hardware (and Internet) since 2006
- Software and Services since 2009
- International Tech since 2009
- Integrated global research since 2011

Previously worked at:

- Joseph Capital Partners LLC (my own!) 2011-2016, Buyside Research in Technology
- Putnam Investments, covering all International Tech, 2009-2011
- Fidelity Investments, domestic Tech, 2006-2009
- Thomas Weisel Partners, semiconductors, 2003-2006
- Two startups in communications equipment 2000-2003
- Bear, Stearns & Co I-Banking 1998-2000

IDEA HUNT

PICKING POOL FOR 2Q-4Q

BULLISH

RNG ++

NTCT +

SWIR +

APTI +

CARB +

MB+

CONE +

DOX + (from Carrier Capex Call)

BEARISH

CTXS -

CALD -

SSNC -

VG -

CSGS -

LOGM -

ORCL -

NOK – (from Carrier Capex Call)

NEUTRAL

INFN +/- TEAM +/-

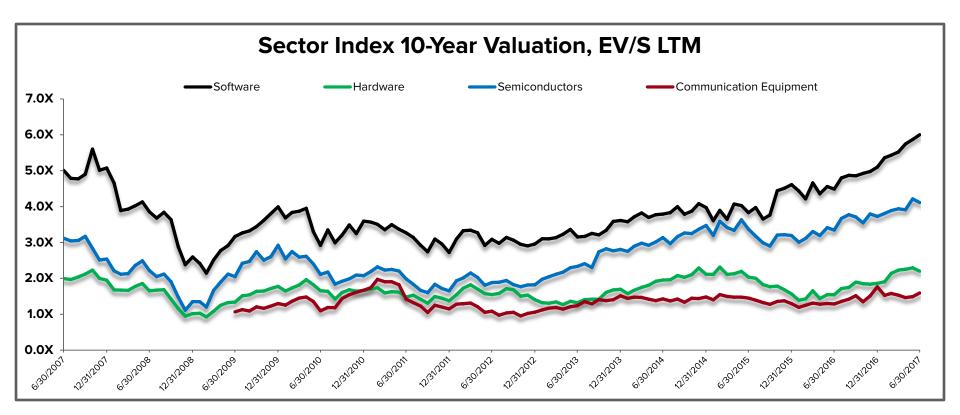
BSFT +/- CHKP +/-

FIVN +/- VRNS +/-

CIEN +/- PFPT +/-

VALUATION OVER TIME

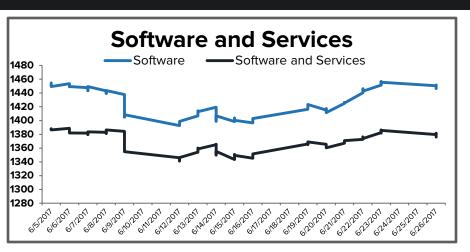
SOFTWARE THE OBVIOUS STANDOUT, SEMIS THE SURPRISE

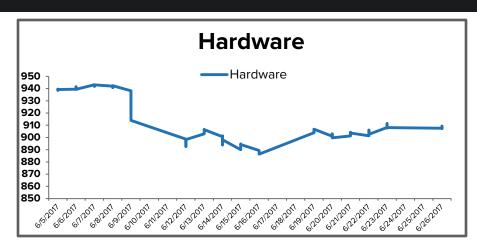


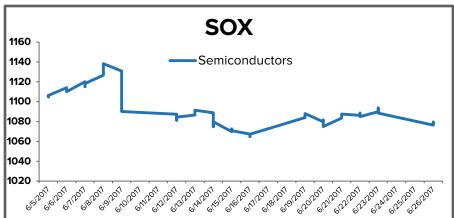
^{*}Indices include S5SOFT, S5TECH, SOX, and Russell 3000 Communications Equipment

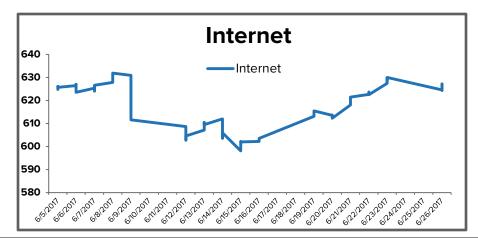
THE COMPUTER CRASH

INDEX PERFORMANCE SINCE THE COMPUTER CRASH

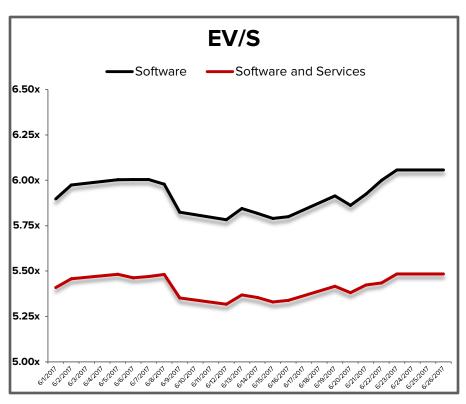


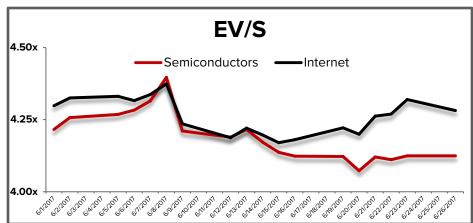


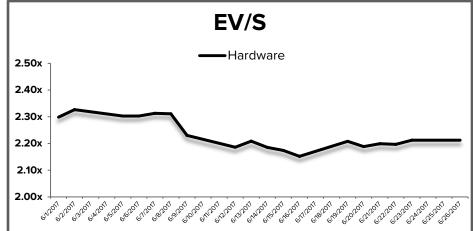




SOME INDICES FLASHED DOWN & RECOVERED







SOME BIG GAINS WERE MADE IN THE TIME SINCE

SNCR UP ON TAKEOVER INTEREST; AMD ON SERVER CHIPS

Name	Ticker	Price	Equity Value (MM)	Return Since Friday Crash	YTD Return	EV/S
QORVO INC	QRVO	\$66.41	\$8,441	-7.4%	25.9%	2.93x
STRATASYS LTD	SSYS	\$24.39	\$1,288	-7.3%	47.5%	1.51x
WAGEWORKS INC	WAGE	\$66.55	\$2,631	-7.1%	-8.2%	6.94x
FORMFACTOR INC	FORM	\$12.55	\$905	-4.9%	12.1%	1.99x
PHOTRONICS INC	PLAB	\$9.50	\$654	-4.5%	-15.9%	1.09x
NANOMETRICS INC	NANO	\$26.11	\$659	-4.1%	4.2%	2.26x
VIAVI SOLUTIONS INC	VIAV	\$10.86	\$2,465	-4.0%	32.8%	2.36x
ENTEGRIS INC	ENTG	\$23.10	\$3,273	-4.0%	29.1%	2.81x
ACACIA COMMUNICATIONS INC	ACIA	\$43.33	\$1,674	-3.9%	-29.8%	2.85x
SILICON LABORATORIES INC	SLAB	\$68.45	\$2,899	-3.3%	5.3%	3.65x
INTEL CORP	INTC	\$34.07	\$160,436	-3.2%	-4.7%	2.68x
PAYCHEX INC	PAYX	\$59.24	\$21,282	-3.0%	-1.2%	6.74x
ELECTRONICS FOR IMAGING	EFII	\$47.98	\$2,230	-3.0%	9.4%	2.12x
COUPA SOFTWARE INC	COUP	\$30.30	\$1,606	-2.9%	21.2%	9.38x
ENGILITY HOLDINGS INC	EGL	\$27.64	\$1,017	-2.8%	-18.0%	1.00x
KEMET CORP	KEM	\$13.33	\$634	-2.8%	101.1%	1.20x
ON SEMICONDUCTOR CORP	ON	\$14.97	\$6,298	-2.7%	17.3%	1.96x
DUN & BRADSTREET CORP	DNB	\$103.20	\$3,808	-2.5%	-14.1%	3.01x
Q2 HOLDINGS INC	QTWO	\$37.15	\$1,521	-2.5%	28.8%	8.94x
MARKETAXESS HOLDINGS INC	MKTX	\$200.85	\$7,538	-2.3%	37.2%	18.76x
FACTSET RESEARCH SYSTEMS INC	FDS	\$166.09	\$6,554	-2.3%	2.3%	5.70x
RUDOLPH TECHNOLOGIES INC	RTEC	\$24.30	\$764	-2.2%	4.1%	2.62x
EQUIFAX INC	EFX	\$139.43	\$16,761	-2.2%	18.6%	5.96x
INOVALON HOLDINGS INC - A	INOV	\$13.30	\$1,942	-2.2%	29.1%	3.85x
SUPER MICRO COMPUTER INC	SMCI	\$24.40	\$1,188	-2.2%	-13.0%	0.52x

Name	Ticker	Price	Equity Value		YTD Return	EV/S
			(MM)	Friday Crash	- To Return	
SYNCHRONOSS TECHNOLOGIES INC	SNCR	\$16.14	\$748	49.3%	-57.9%	1.72x
NANTHEALTH INC	NH	\$4.95	\$602	38.7%	-50.2%	4.61x
ADVANCED MICRO DEVICES	AMD	\$14.08	\$13,306	23.1%	24.2%	3.11x
POWER INTEGRATIONS INC	POWI	\$72.75	\$2,160	14.3%	7.7%	4.70x
INSTRUCTURE INC	INST	\$29.55	\$855	13.7%	51.2%	6.71x
ORACLE CORP	ORCL	\$50.86	\$209,273	12.8%	33.4%	5.33x
VASCO DATA SECURITY INTL	VDSI	\$14.65	\$589	11.8%	7.3%	2.36x
NUTANIX INC - A	NTNX	\$19.75	\$2,993	11.8%	-25.6%	3.88x
RED HAT INC	RHT	\$98.19	\$17,431	11.8%	40.9%	6.30x
SYNAPTICS INC	SYNA	\$58.36	\$2,002	11.6%	8.9%	1.17x
CASTLIGHT HEALTH INC-B	CSLT	\$4.30	\$561	10.3%	-13.1%	4.29x
CA INC	CA	\$34.81	\$14,663	9.9%	11.3%	3.64x
CALLIDUS SOFTWARE INC	CALD	\$24.30	\$1,576	9.2%	44.6%	6.44x
PERFICIENT INC	PRFT	\$18.92	\$667	8.9%	8.2%	1.46x
MICRON TECHNOLOGY INC	MU	\$32.50	\$35,955	8.8%	48.3%	3.04x
INNERWORKINGS INC	INWK	\$11.65	\$630	8.0%	18.3%	0.66x
QUANTENNA COMMUNICATIONS INC	QTNA	\$20.82	\$702	7.9%	14.8%	4.16x
MACOM TECHNOLOGY SOLUTIONS H	MTSI	\$60.25	\$3,846	7.9%	30.2%	6.79x
TWILIO INC - A	TWLO	\$28.94	\$2,619	7.7%	0.3%	7.63x
2U INC	TWOU	\$47.87	\$2,276	7.6%	58.8%	9.55x
FITBIT INC - A	FIT	\$5.44	\$1,243	7.5%	-25.7%	0.26x
CARBONITE INC	CARB	\$23.40	\$643	7.3%	42.7%	2.97x
BLACKLINE INC	BL	\$37.80	\$1,939	7.3%	36.8%	13.59x
TECH DATA CORP	TECD	\$103.25	\$3,937	7.2%	21.9%	0.19x
SERVICENOW INC	NOW	\$108.35	\$18,406	7.1%	45.7%	11.95x

DID THE MARKET CAP MATTER?

BIG CAPS UP 1.9% OVER THAT TIME; SMALL CAPS UP 4.0%

Name	Ticker	Price	Equity Value (MM)	Return Since Friday Crash	YTD Return	EV/S
APPLE INC	AAPL	\$145.82	\$760,282	2.5%	27.0%	2.73x
MICROSOFT CORP	MSFT	\$70.53	\$544,528	0.8%	14.8%	5.76x
ORACLE CORP	ORCL	\$50.86	\$209,273	12.8%	33.4%	5.33x
CISCO SYSTEMS INC	csco	\$32.24	\$161,202	1.9%	8.5%	2.59x
INTEL CORP	INTC	\$34.07	\$160,436	-3.2%	-4.7%	2.68x
INTL BUSINESS MACHINES CORP	IBM	\$155.23	\$145,838	-0.1%	-4.8%	2.24x
BROADCOM LTD	AVGO	\$242.75	\$98,700	2.8%	38.5%	6.81x
NVIDIA CORP	NVDA	\$152.15	\$90,529	0.3%	42.9%	11.47x
QUALCOMM INC	QCOM	\$56.56	\$83,564	-0.5%	-11.6%	2.87x
TEXAS INSTRUMENTS INC	TXN	\$78.31	\$78,022	-1.7%	8.7%	5.69x
ADOBE SYSTEMS INC	ADBE	\$144.96	\$71,711	5.2%	40.8%	10.52x
SALESFORCE.COM INC	CRM	\$88.11	\$62,752	2.5%	28.7%	6.92x
APPLIED MATERIALS INC	AMAT	\$43.25	\$46,478	0.3%	34.7%	3.48x
AUTOMATIC DATA PROCESSING	ADP	\$102.21	\$45,730	-1.2%	0.6%	3.66x
ACTIVISION BLIZZARD INC	ATVI	\$60.22	\$45,386	2.4%	67.8%	6.77x
COGNIZANT TECH SOLUTIONS-A	CTSH	\$67.46	\$39,734	1.3%	20.7%	2.65x
S&P GLOBAL INC	SPGI	\$146.27	\$37,708	-1.5%	36.8%	6.93x
VMWARE INC-CLASS A	VMW	\$90.66	\$37,028	2.9%	15.2%	4.22x
MICRON TECHNOLOGY INC	MU	\$32.50	\$35,955	8.8%	48.3%	3.04x
INTUIT INC	INTU	\$138.40	\$35,460	-0.8%	21.5%	6.75x
ELECTRONIC ARTS INC	EA	\$111.86	\$34,630	1.2%	42.0%	6.42x
HP INC	HPQ	\$18.16	\$30,569	4.7%	24.2%	0.63x
ANALOG DEVICES INC	ADI	\$80.57	\$29,570	0.7%	12.2%	9.06x
CORNING INC	GLW	\$30.23	\$27,819	2.8%	25.9%	3.01x
HEWLETT PACKARD ENTERPRIS	HPE	\$16.81	\$27,613	1.9%	-2.4%	0.77x

Name	Ticker	Price	Equity Value (MM)	Return Since Friday Crash	YTD Return	EV/S
XACTLY CORP	XTLY	\$15.65	\$503	0.6%	42.3%	4.87x
XCERRA CORP	XCRA	\$9.83	\$533	-0.5%	28.7%	1.15x
PDF SOLUTIONS INC	PDFS	\$16.90	\$543	2.9%	-25.1%	4.02x
CASTLIGHT HEALTH INC-B	CSLT	\$4.30	\$561	10.3%	-13.1%	4.29x
MOBILEIRON INC	MOBL	\$6.30	\$581	1.6%	68.0%	2.91x
QAD INC-A	QADA	\$31.85	\$584	2.9%	5.3%	1.57x
A10 NETWORKS INC	ATEN	\$8.48	\$588	2.2%	2.0%	2.00x
VASCO DATA SECURITY INTL	VDSI	\$14.65	\$589	11.8%	7.3%	2.36x
NANTHEALTH INC	NH	\$4.95	\$602	38.7%	-50.2%	4.61x
INNERWORKINGS INC	INWK	\$11.65	\$630	8.0%	18.3%	0.66x
KEMET CORP	KEM	\$13.33	\$634	-2.8%	101.1%	1.20x
CARBONITE INC	CARB	\$23.40	\$643	7.3%	42.7%	2.97x
UNISYS CORP	UIS	\$12.80	\$645	3.2%	-14.4%	0.22x
PHOTRONICS INC	PLAB	\$9.50	\$654	-4.5%	-15.9%	1.09x
NANOMETRICS INC	NANO	\$26.11	\$659	-4.1%	4.2%	2.26x
PERFICIENT INC	PRFT	\$18.92	\$667	8.9%	8.2%	1.46x
LIVEPERSON INC	LPSN	\$11.70	\$684	3.1%	55.0%	2.91x
ULTRA CLEAN HOLDINGS INC	UCTT	\$20.57	\$688	-0.3%	112.1%	1.06x
CALAMP CORP	CAMP	\$19.62	\$694	1.2%	35.3%	2.11x
FORRESTER RESEARCH INC	FORR	\$39.30	\$697	-0.5%	-7.6%	1.73x
CTS CORP	CTS	\$21.35	\$701	-0.5%	-4.3%	1.69x
QUANTENNA COMMUNICATIONS INC	QTNA	\$20.82	\$702	7.9%	14.8%	4.16x
AXCELIS TECHNOLOGIES INC	ACLS	\$23.35	\$703	-0.8%	60.5%	2.21x
APPTIO INC - CLASS A	APTI	\$17.86	\$710	5.5%	-3.6%	3.47x
CRAY INC	CRAY	\$18.15	\$731	-0.8%	-12.3%	0.77x

HOW ABOUT VALUATION?

LOOKS LIKE CHEAP STUFF WAS SOLD A BIT MORE

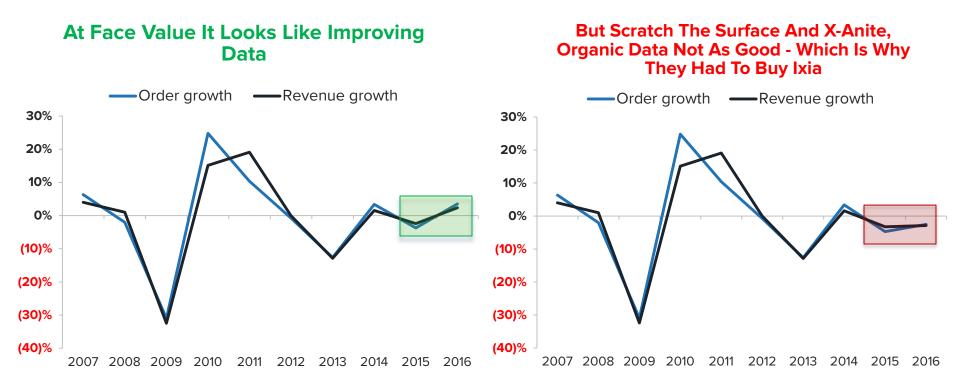
Name	Ticker	Price	Equity Value (MM)	Return Since Friday Crash	YTD Return	EV/S
TECH DATA CORP	TECD	\$103.25	\$3,937	7.2%	21.9%	0.19x
UNISYS CORP	UIS	\$12.80	\$645	3.2%	-14.4%	0.22x
FITBIT INC - A	FIT	\$5.44	\$1,243	7.5%	-25.7%	0.26x
AVNET INC	AVT	\$38.94	\$4,867	0.9%	-17.5%	0.27x
JABIL INC	JBL	\$30.24	\$5,512	6.3%	28.5%	0.38x
SYNNEX CORP	SNX	\$126.27	\$5,040	6.8%	4.8%	0.39x
ARROW ELECTRONICS INC	ARW	\$79.81	\$7,091	3.5%	11.9%	0.40x
FLEX LTD	FLEX	\$16.97	\$8,993	2.8%	18.1%	0.43x
SANMINA CORP	SANM	\$39.60	\$2,991	5.6%	8.0%	0.44x
BENCHMARK ELECTRONICS INC	BHE	\$33.63	\$1,672	1.3%	10.2%	0.49x
SUPER MICRO COMPUTER INC	SMCI	\$24.40	\$1,188	-2.2%	-13.0%	0.52x
PLEXUS CORP	PLXS	\$53.09	\$1,790	2.8%	-1.8%	0.60x
HP INC	HPQ	\$18.16	\$30,569	4.7%	24.2%	0.63x
INNERWORKINGS INC	INWK	\$11.65	\$630	8.0%	18.3%	0.66x
VISHAY INTERTECHNOLOGY INC	VSH	\$16.48	\$2,408	-0.5%	2.5%	0.70x
CRAY INC	CRAY	\$18.15	\$731	-0.8%	-12.3%	0.77x
HEWLETT PACKARD ENTERPRIS	HPE	\$16.81	\$27,613	1.9%	-2.4%	0.77x
NETGEAR INC	NTGR	\$44.10	\$1,431	1.7%	-18.9%	0.80x
DIEBOLD NIXDORF INC	DBD	\$26.85	\$2,027	0.8%	7.5%	0.81x
CONVERGYS CORP	CVG	\$24.27	\$2,284	0.2%	-0.3%	0.84x
XEROX CORP	XRX	\$29.19	\$7,419	2.4%	28.0%	0.84x
CONDUENT INC	CNDT	\$15.91	\$3,330	-0.1%	6.8%	0.85x
AMKOR TECHNOLOGY INC	AMKR	\$10.37	\$2,479	-1.8%	-1.7%	0.87x
MANTECH INTERNATIONAL CORP-A	MANT	\$39.25	\$1,523	1.1%	-6.1%	0.88x
SCIENCE APPLICATIONS INTE	SAIC	\$70.31	\$3,071	-1.0%	-16.4%	0.90x

Name	Ticker	Price	Equity Value (MM)	Return Since Friday Crash	YTD Return	EV/S
UNIVERSAL DISPLAY CORP	OLED	\$117.50	\$5,526	0.5%	108.8%	23.15x
MARKETAXESS HOLDINGS INC	MKTX	\$200.85	\$7,538	-2.3%	37.2%	18.76x
VEEVA SYSTEMS INC-CLASS A	VEEV	\$62.33	\$8,711	4.5%	53.1%	13.82x
BLACKLINE INC	BL	\$37.80	\$1,939	7.3%	36.8%	13.59x
LOGMEIN INC	LOGM	\$110.30	\$5,805	1.6%	15.0%	12.48x
SERVICENOW INC	NOW	\$108.35	\$18,406	7.1%	45.7%	11.95x
PAYCOM SOFTWARE INC	PAYC	\$71.77	\$4,265	3.5%	57.8%	11.73x
CEVA INC	CEVA	\$47.10	\$1,015	3.6%	40.4%	11.64x
NVIDIA CORP	NVDA	\$152.15	\$90,529	0.3%	42.9%	11.47x
WORKDAY INC-CLASS A	WDAY	\$102.23	\$21,043	3.9%	54.7%	11.43x
AUTODESK INC	ADSK	\$106.12	\$23,388	1.2%	43.4%	11.37x
ADOBE SYSTEMS INC	ADBE	\$144.96	\$71,711	5.2%	40.8%	10.52x
GUIDEWIRE SOFTWARE INC	GWRE	\$69.04	\$5,135	2.7%	40.0%	9.82x
APPFOLIO INC - A	APPF	\$34.00	\$1,151	6.9%	42.6%	9.81x
COSTAR GROUP INC	CSGP	\$263.94	\$8,644	3.0%	40.0%	9.69x
2U INC	TWOU	\$47.87	\$2,276	7.6%	58.8%	9.55x
ANSYS INC	ANSS	\$122.78	\$10,497	0.8%	32.7%	9.48x
MONOLITHIC POWER SYSTEMS INC	MPWR	\$99.51	\$4,106	2.4%	21.7%	9.46x
IMPINJ INC	PI	\$59.37	\$1,225	6.6%	68.0%	9.45x
COUPA SOFTWARE INC	COUP	\$30.30	\$1,606	-2.9%	21.2%	9.38x
MSCI INC	MSCI	\$104.22	\$9,427	-1.3%	33.1%	9.21x
ANALOG DEVICES INC	ADI	\$80.57	\$29,570	0.7%	12.2%	9.06x
PROOFPOINT INC	PFPT	\$85.78	\$3,750	-1.9%	21.4%	9.05x
Q2 HOLDINGS INC	QTWO	\$37.15	\$1,521	-2.5%	28.8%	8.94x
ASPEN TECHNOLOGY INC	AZPN	\$55.66	\$4,146	0.8%	1.8%	8.85x

FUNDAMENTALS

GROWTH CHALLENGED COMPANIES

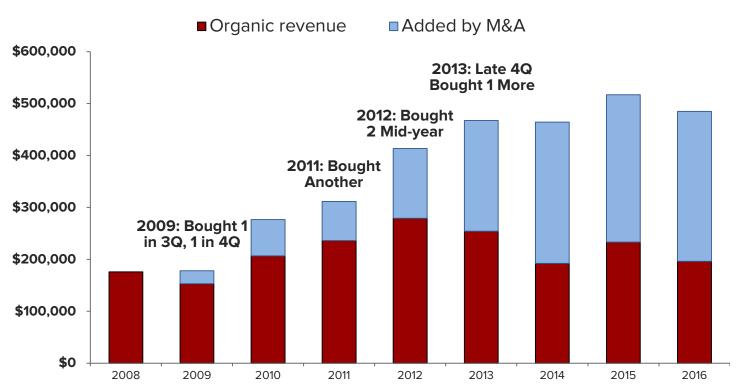
RELY ON M&A FOR GROWTH, THEN ERRONEOUSLY TELL US TO MODEL INORGANIC GROWTH RATES



SO I THOUGHT, IF I'VE COME THIS FAR...

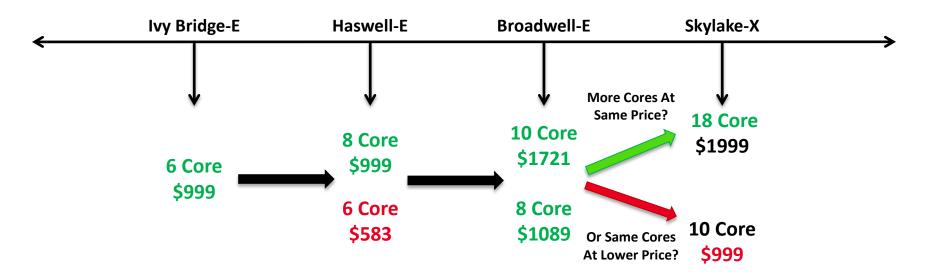
AMAZING WHAT IS BEING SOLD: A FLAT DECADE PLUS COBBLED TOGETHER M&A





INTEL GOT RICH ON BROADWELL

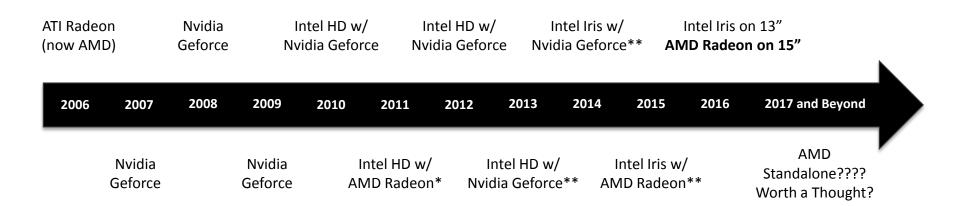
TOP SKU'S PRICE FOR PAST FOUR INTEL GENERATIONS



INTC INCREASED PRICES WHILE THEY COULD, THEN CUT \$/CORE IN HALF

The mass update feels like a self-consuming chase. It validates multicore processors as a market, incentivizing software writers towards gearing traditionally single-threaded applications like games into multi-threaded ones- boosting AMD's strength. At that, price per core was cut in half since last generation, cutting the profits on a like-to-like basis

HISTORY OF THE MACBOOK PRO GRAPHICS CARD



APPLE CHOSE TOP RATE INTC CPUS, BUT THIRD RATE INTC GPUS- TIME FOR A SWITCH?

Although this is not the first time AMD has been in the MacBook Pro, it is the first time since 2011 that it has been offered as a discrete option. During that time, Intel was the only legitimate high-end CPU maker. Now that AMD can compete in CPUs while beating Intel handedly in GPUs, they can compete with a more all-around integrated system (integrated is thinner than discrete, and thus more favorable to notebook OEMs)

^{*} Signifies non-Intel GPU offered as a shared GPU w/ Intel GPU, or on its own w/o Intel

^{**} Signifies an Intel-only graphics as well as the shared GPU

FOR MORE INFORMATION, CONTACT US AT:

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