

## 3Q23 Semiconductor Earnings Summary—Final

### Robust 3Q Results and 4Q Guidance, but Most Firms Miss Expectations

The 3Q earnings season is now complete with all 53 companies in my Tokeneke Universe having reported, and the announcements finished on a high-note thanks to Nvidia. The overall semiconductor industry continues to exhibit signs of a cyclical business recovery with aggregate 3Q revenue growth significantly exceeding both the high-end of expectations and historical norms, and 4Q guidance for sequential growth significantly above its historical average. However, most companies missed all or some mix of expectations for both 3Q results and 4Q guidance, and the average of share prices across my universe have under-performed broader equity markets this quarter—despite aggregate industry gains in both areas.

**Structural Differences:** Recall that my US-equity Tokeneke Universe does *not* include some large international players (Samsung, SK Hynix, Renesas, Kioxia, MediaTek, Infineon), although it does include wafer foundries (TSMC, UMC, GlobalFoundries, Tower Semi) and IP companies (Rambus, Xperi, Adeia, Ceva, InterDigital) that count as manufacturing costs rather than industry sales. I also normalize fiscal quarters to the best fitting two out of three months. Unreported acquisition stub-periods and mergers exiting the sector can also make a difference.

**3Q Growth Exceeds Expectations:** Chip industry 3Q revenue growth improved significantly over Week 3 and ended-up exceeding both norms and the high-end of guidance. The weighted average sales across my Tokeneke Universe increased to sequential quarterly growth of +9.2% compared to company guidance centered at +5.5% ranging from +2.4% to +8.5%. There were only four preannouncements ahead of earnings season: increases from PXLW and SIMO; a decrease from ADEA; and a reiteration from SMTC. SIA/WSTS industry statistics reported total industry growth of +6.3% early last month. The 3Q is seasonally the fastest growing quarter with an industry average sequential revenue growth of +5.9%, a high of +19.9%, a low of -11.7%, and only four declines in the last 37 years—including only one (last year) since 2001, according to industry statistics.

		3Q	4Q	4Q Range
<b>Week 1</b>	Weighted	5.3%	-0.9%	-2.8+0.9%
<b>8 co's</b>	co. avg	-4.0%	-13.9%	-17.5-10.3%
<b>Week 2</b>	Weighted	6.9%	4.4%	+0.9+7.8%
<b>29 co's</b>	co. avg	8.2%	-1.5%	-5.3+2.2%
<b>Week 3</b>	Weighted	6.4%	3.6%	+0.2+6.9%
<b>44 co's</b>	co. avg	6.9%	-2.1%	-5.9+1.6%
<b>Final</b>	Weighted	9.2%	4.0%	+1.1+7.0%
<b>54 co's</b>	co. avg	8.2%	-1.5%	-5.4+2.4%

**Above-Average 4Q Guidance:** The 4Q revenue outlook based on management guidance across my Tokeneke Universe also improved over Week 3 and is well above average for this typically anemic period, although the average company continues to expect a sequential decline as noted in the table above. The specific weighted average guidance for revenue calls for solid sequential growth of +4.0% this quarter, ranging from +1.1% to +7.0%. The 4Q is seasonally the second weakest quarter of the year with average sequential revenue growth of only +1.5%, a high of +16.0%, a low of -24.2%, and 14 declines in the last 37 years—including 10 of the last 16, according to industry statistics. In addition, Micron recently preannounced expected upside raising industry growth to +4.3%.

**But Most Companies Miss Expectations:** The Performance to Expectations histogram on Page 2 shows that most companies missed expectations last quarter. Specifically, those reporting 'mixed' results simultaneously missing, meeting and exceeding results finished at 50% (up from 46% Week 3, 45% Week 2 and 25% Week 1), while underperformers that completely missed expectations was at 10% (vs.12%, 10% and 25%). The category of outperforming companies meeting or exceeding expectations dropped to 40% (from 42%, 45% and 50%). Recall this metric compares investor expectations to reported results for 3Q revenue and EPS, as well as 4Q revenue guidance. Note the grading metric Legend on Page 2 and company details on Pages 3-5.

**Chip Sector Outperforms:** Semiconductor sector share prices outperformed broader equity market advances over the last four weeks—and the average across my Tokeneke Universe turned positive from negative, although it continues to underperform. Specifically, quarter-to-date the Philadelphia Semiconductor Index Option (SOX) has gained +9.9% with 37 out of 53 stocks in my Universe advancing by an average of 5.6% compared to the NASDAQ, S&P500 and DOW at +9.0%, +7.4%, and +8.2%, respectively.

**Recovery Intact, but Choose Carefully:** While the chip industry recovery appears intact, most of the companies in the sector are not necessarily participating. This results in a pronounced bifurcation between 'haves' and 'have nots' mandating unusually careful discrimination when evaluating opportunities within the sector. Tread carefully.

*CY3Q23 earnings announcements through December 8, 2023. Most earnings and gross margins are non-GAAP.*

*Companies sorted alphabetically by ticker across all compilations in this report.*

## 3Q23 Earnings Review

\* includes acquisition (and/or divestiture)

Ticker	Revenue			Ticker	Revenue		
	3Q23 (\$ mil)	Qtr-Qtr change	4Q23 Guidance		3Q23 (\$ mil)	Qtr-Qtr change	4Q23 Guidance
ADEA	101.4	21.9%	-18-8%	NXPI	3,434.0	4.1%	-4+2%
ADI	2,716.5	-11.7%	-12-4%	ON	2,180.8	4.1%	-11-6%
AMBA	50.6	-18.5%	-1+5%	PI	65.0	-24.4%	+1+5%
AMD	5,800.0	8.2%	+0+10%	POWI	125.5	1.9%	-32-24%
AOSL	180.6	11.8%	-14-3%	PXLW	16.0	17.6%	+19+31%
ARM	806.0	19.4%	-11-1%	QCOM	8,665.0	2.6%	+5+14%
AVGO	9,295.0	4.7%	FY only	QRVO	1,103.5	69.5%	-12-7%
CEVA	24.1	-8.0%	-3+5%	QUIK	6.7	128.4%	+0+22%
CRUS	481.1	51.8%	+6+19%	RMBS	105.3	-12.1%	+19+36%
DIOD	404.6	-13.4%	-22-17%	SIMO	172.3	22.7%	+10+15%
GFS	1,852.0	0.4%	-2+1%	SITM	35.5	28.1%	+15+20%
GSIT	5.7	2.1%	-5+9%	SKYT	71.6	2.6%	+2+8%
HIMX	238.5	1.5%	-11-5%	SLAB	203.8	-16.8%	-66-51%
IDCC	140.1	37.9%	-27-24%	SMTC	200.9	-15.7%	-10-0%
INFN	385.0	2.3%	+9+17%	SQNS	7.8	-15.0%	no guidance
INTC	14,158.0	9.3%	+3+10%	STM	4,431.0	2.4%	-6+0%
LSCC	192.2	1.1%	-14-3%	SWKS	1,218.8	13.8%	-4+1%
MCHP	2,254.3	-1.5%	-20-15%	SYNA	237.7	4.6%	-7+5%
MPWR	474.9	7.7%	-7-3%	TSEM	358.2	0.3%	-7+3%
MRAM	16.5	4.6%	-7-0%	TSM	17,278.0	10.2%	+9+13%
MRVL	1,418.6	5.8%	-5+5%	TXN	4,532.0	0.0%	-13-6%
MTSI	150.4	1.3%	-1+2%	UMC	1,769.0	-2.2%	-5%
MU	4,010.0	6.9%	+5+15%	VSH	853.7	-4.3%	-10-5%
MX	61.2	0.3%	-18-10%	WDC	2,750.0	2.9%	+4+11%
MXL	135.5	-26.3%	-15-0%	WOLF	197.4	-16.3%	-3+13%
NLST	16.7	67.3%	up some	XPER	130.4	2.8%	+3+14%
NVDA	18,120.0	34.2%	+8+13%				

Total (weighted): 113,639.4 9.2% +1.1+7.0%

Company Average (mean): 8.2% -5.4+2.4%

\*INFN 3Q estimates pending revenue recognition audit.

Note: No guidance from SQNS due to pending takeover.

Note: 'no guidance' is calculated as flat revenue for statistical purposes.

ADI					
AOSL					
AVGO					
CEVA					
GFS					
HIMX					
LSCC					
MCHP					
MRAM					
MRVL					
MTSI					
MX					
NLST					
ON					
RMBS			AMBA		
SITM			AMD		
SLAB			CRUS		
SMTC			GSIT		
STM			MPWR		
SWKS			MU		
SYNA			NXPI		
DIOD			PI	IDCC	
MXL			QRVO	INTC	
POWI			SIMO	NVDA	
SQNS			TSM	QCOM	
TXN			WDC	SKYT	

9.6%	0.0%	50.0%	7.7%	23.1%	9.6%
<b>F</b>	<b>E</b>	<b>D</b>	<b>C</b>	<b>B</b>	<b>A</b>

missed/met 9.6% mixed 50.0% met/exceeded 40.4%

Total: 52 companies with estimates or guidance

## Performance to Expectations Skew

<b>ADEA</b>	2 est.	<i>Adeia</i>		CY23rev:	-11%	<b>GSIT</b>	no est.	<i>GSI Technology</i>		FY24rev:	na
Qtr:	3Q	Grade:	C	Growth	(qtr-qtr)	Qtr:	F2Q	Grade:	B	Growth	(qtr-qtr)
Rev:	101.4	Rev:	+++	Rev:	21.9%	Rev:	5.71	Rev:	+	Rev:	2.1%
GM:	100.0%	EPS:	+++	Fcst:	-18-8%	GM:	54.7%	EPS:	na	Fcst:	-5+9%
EPS:	\$0.38	Fcst:	o	Div:	\$0.05	EPS:	(\$0.16)	Fcst:	na	Div:	
<b>ADI</b>	24 est.	<i>Analog Devices</i>		FY24rev:	-11%	<b>HIMX</b>	2 est.	<i>Himax</i>		CY23rev:	-21%
Qtr:	F4Q	Grade:	D	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	D	Growth	(qtr-qtr)
Rev:	2,716.5	Rev:	++	Rev:	-11.7%	Rev:	238.5	Rev:	+++	Rev:	1.5%
GM:	70.2%	EPS:	+	Fcst:	-12-4%	GM:	31.4%	EPS:	+++	Fcst:	-11-5%
EPS:	\$2.01	Fcst:	--	Div:	\$0.86	EPS:	\$0.064	Fcst:	---	Div:	\$0.12
<b>AMBA</b>	16 est.	<i>Ambarella</i>		FY24rev:	-32%	<b>IDCC</b>	5 est.	<i>InterDigital</i>		CY23rev:	10%
Qtr:	F3Q	Grade:	B	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	A	Growth	(qtr-qtr)
Rev:	50.6	Rev:	+	Rev:	-18.5%	Rev:	140.1	Rev:	+++	Rev:	37.9%
GM:	62.6%	EPS:	+++	Fcst:	-1+5%	GM:	100.0%	EPS:	+++	Fcst:	-27-24%
EPS:	(\$0.28)	Fcst:	+++	Div:		EPS:	\$2.13	Fcst:	+++	Div:	\$0.40
<b>AMD</b>	30 est.	<i>Advanced Micro</i>		CY23rev:	-9%	<b>INFN</b>	10 est.	<i>Infinera</i>		CY23rev:	0%
Qtr:	3Q	Grade:	B	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	C	Growth	(qtr-qtr)
Rev:	5,800	Rev:	+++	Rev:	8.2%	*Rev:	385.0	Rev:	+++	*Rev:	2.3%
GM:	51.0%	EPS:	+++	Fcst:	+0+10%	*GM:	41.1%	EPS:	+++	*Fcst:	+9+17%
EPS:	\$0.70	Fcst:	+	Div:		*EPS:	\$0.055	Fcst:	o	Div:	
<b>AOSL</b>	3 est.	<i>Alpha &amp; Omega</i>		FY24rev:	2%	<b>INTC</b>	31 est.	<i>Intel</i>		CY23rev:	-17%
Qtr:	F1Q	Grade:	D	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	A	Growth	(qtr-qtr)
Rev:	180.6	Rev:	+++	Rev:	11.8%	Rev:	14,158	Rev:	+++	Rev:	9.3%
GM:	28.8%	EPS:	+	Fcst:	-14-3%	GM:	45.8%	EPS:	+++	Fcst:	+3+10%
EPS:	\$0.33	Fcst:	---	Div:		EPS:	\$0.41	Fcst:	+++	Div:	\$0.125
<b>ARM</b>	no est.	<i>ARM</i>		FY24rev:	13%	<b>LSCC</b>	10 est.	<i>Lattice Semi</i>		CY23rev:	15%
Qtr:	F2Q	Grade:	na	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	D	Growth	(qtr-qtr)
Rev:	806.0	Rev:		Rev:	19.4%	Rev:	192.2	Rev:	o	Rev:	1.1%
GM:	96.8%	EPS:		Fcst:	-11-1%	GM:	70.6%	EPS:	+	Fcst:	-14-3%
EPS:	\$0.36	Fcst:		Div:		EPS:	\$0.53	Fcst:	---	Div:	
<b>AVGO</b>	26 est.	<i>Broadcom</i>		CY23rev:	40%	<b>MCHP</b>	20 est.	<i>Microchip Tech</i>		FY24rev:	3%
Qtr:	F4Q	Grade:	D	Growth	(qtr-qtr)	Qtr:	F2Q	Grade:	D	Growth	(qtr-qtr)
Rev:	9,295	Rev:	--	Rev:	4.7%	Rev:	2,254.3	Rev:	--	Rev:	-1.5%
GM:	74.3%	EPS:	+	Fcst:	FY only	GM:	68.1%	EPS:	+	Fcst:	-20-15%
EPS:	\$11.06	Fcst:	na	Div:	\$5.25	EPS:	\$1.62	Fcst:	---	Div:	\$0.439
<b>CEVA</b>	5 est.	<i>Ceva</i>		CY23rev:	-16%	<b>MPWR</b>	12 est.	<i>Monolithic Power Sys</i>		CY23rev:	1%
Qtr:	3Q	Grade:	D	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	B	Growth	(qtr-qtr)
Rev:	24.07	Rev:	---	Rev:	-8.0%	Rev:	474.9	Rev:	+	Rev:	7.7%
GM:	92.0%	EPS:	++	Fcst:	-3+5%	GM:	55.7%	EPS:	+	Fcst:	-7-3%
EPS:	\$0.06	Fcst:	---	Div:		EPS:	\$3.08	Fcst:	+	Div:	\$1.00
<b>CRUS</b>	8 est.	<i>Cirrus Logic</i>		FY24rev:	-11%	<b>MRAM</b>	1 est.	<i>Everspin Tech</i>		CY23rev:	4%
Qtr:	F2Q	Grade:	B	Growth	(qtr-qtr)	Qtr:	3Q	Grade:	D	Growth	(qtr-qtr)
Rev:	481.1	Rev:	+++	Rev:	51.8%	Rev:	16.47	Rev:	++	Rev:	4.6%
GM:	51.3%	EPS:	+++	Fcst:	+6+19%	GM:	60.2%	EPS:	-	Fcst:	-7-0%
EPS:	\$1.80	Fcst:	+	Div:		EPS:	\$0.11	Fcst:	+	Div:	
<b>DIOD</b>	6 est.	<i>Diodes</i>		CY23rev:	-12%	<b>MRVL</b>	26 est.	<i>Marvell</i>		FY24rev:	-7%
Qtr:	3Q	Grade:	F	Growth	(qtr-qtr)	Qtr:	F3Q	Grade:	D	Growth	(qtr-qtr)
Rev:	404.6	Rev:	---	Rev:	-13.4%	Rev:	1,418.6	Rev:	+++	Rev:	5.8%
GM:	38.5%	EPS:	---	Fcst:	-22-17%	GM:	60.6%	EPS:	+	Fcst:	-5+5%
EPS:	\$1.13	Fcst:	---	Div:		EPS:	\$0.41	Fcst:	--	Div:	\$0.06
<b>GFS</b>	13 est.	<i>GlobalFoundries</i>		CY23rev:	-8%	<b>MTSI</b>	13 est.	<i>MACOM Tech</i>		FY24rev:	3%
Qtr:	3Q	Grade:	D	Growth	(qtr-qtr)	Qtr:	F4Q	Grade:	D	Growth	(qtr-qtr)
Rev:	1,852	Rev:	+	Rev:	0.4%	Rev:	150.4	Rev:	o	Rev:	1.3%
GM:	29.2%	EPS:	+++	Fcst:	-2+1%	GM:	60.1%	EPS:	+	Fcst:	-1+2%
EPS:	\$0.55	Fcst:	---	Div:		EPS:	\$0.56	Fcst:	---	Div:	

<b>MU</b>	25 est.	Micron Tech	FY24rev:	32%	<b>QRVO</b>	22 est.	Qorvo	CY23rev:	1%
<b>Qtr:</b>	F4Q	<b>Grade:</b> B	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	FQ2	<b>Grade:</b> B	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	4,010	<b>Rev:</b> ++	<b>Rev:</b> 6.9%		<b>Rev:</b>	1,103.5	<b>Rev:</b> +++	<b>Rev:</b> 69.5%	
<b>GM:</b>	-9.1%	<b>EPS:</b> +++	<b>Fcst:</b> +5+15%		<b>GM:</b>	47.6%	<b>EPS:</b> +++	<b>Fcst:</b> -12-7%	
<b>EPS:</b>	(\$1.07)	<b>Fcst:</b> ++	<b>Div:</b> \$0.115		<b>EPS:</b>	\$2.39	<b>Fcst:</b> +	<b>Div:</b>	
<b>MX</b>	3 est.	MagnaChip	CY23rev:	-28%	<b>QUIK</b>	2 est.	QuickLogic	CY23rev:	31%
<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> C	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	61.2	<b>Rev:</b> - - -	<b>Rev:</b> 0.3%		<b>Rev:</b>	6.67	<b>Rev:</b> ++	<b>Rev:</b> 128.4%	
<b>GM:</b>	23.6%	<b>EPS:</b> +++	<b>Fcst:</b> -18-10%		<b>GM:</b>	78.0%	<b>EPS:</b> o	<b>Fcst:</b> +0+22%	
<b>EPS:</b>	(\$0.04)	<b>Fcst:</b> - - -	<b>Div:</b>		<b>EPS:</b>	\$0.13	<b>Fcst:</b> o	<b>Div:</b>	
<b>MXL</b>	10 est.	MaxLinear	CY23rev:	-36%	<b>RMBS</b>	5 est.	Rambus	CY23rev:	19%
<b>Qtr:</b>	3Q	<b>Grade:</b> F	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	135.5	<b>Rev:</b> - -	<b>Rev:</b> -26.3%		<b>Rev:</b>	105.3	<b>Rev:</b> - -	<b>Rev:</b> -12.1%	
<b>GM:</b>	60.8%	<b>EPS:</b> - -	<b>Fcst:</b> -15-0%		<b>GM:</b>	77.2%	<b>EPS:</b> +++	<b>Fcst:</b> +19+36%	
<b>EPS:</b>	\$0.02	<b>Fcst:</b> - - -	<b>Div:</b>		<b>EPS:</b>	\$0.93	<b>Fcst:</b> -	<b>Div:</b>	
<b>NLST</b>	1 est.	Netlist	CY23rev:	-71%	<b>SIMO</b>	8 est.	Silicon Motion	CY23rev:	-35%
<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> B	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	16.73	<b>Rev:</b> +++	<b>Rev:</b> 67.3%		<b>Rev:</b>	172.3	<b>Rev:</b> +++	<b>Rev:</b> 22.7%	
<b>GM:</b>	2.6%	<b>EPS:</b> - -	<b>Fcst:</b> up some		<b>GM:</b>	42.5%	<b>EPS:</b> +	<b>Fcst:</b> +10+15%	
<b>EPS:</b>	(\$0.07)	<b>Fcst:</b> +	<b>Div:</b>		<b>EPS:</b>	\$0.63	<b>Fcst:</b> +++	<b>Div:</b> \$0.50	
<b>NVDA</b>	33 est.	NVIDIA	FY24rev:	88%	<b>SITM</b>	6 est.	SiTime	CY23rev:	-98%
<b>Qtr:</b>	F3Q	<b>Grade:</b> A	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	18,120	<b>Rev:</b> +++	<b>Rev:</b> 34.2%		<b>Rev:</b>	35.52	<b>Rev:</b> +++	<b>Rev:</b> 28.1%	
<b>GM:</b>	75.0%	<b>EPS:</b> +++	<b>Fcst:</b> +8+13%		<b>GM:</b>	58.2%	<b>EPS:</b> +++	<b>Fcst:</b> +15+20%	
<b>EPS:</b>	\$4.02	<b>Fcst:</b> +++	<b>Div:</b> \$0.04		<b>EPS:</b>	\$0.06	<b>Fcst:</b> - - -	<b>Div:</b>	
<b>NXPI</b>	22 est.	NXP Semi	CY23rev:	0%	<b>SKYT</b>	5 est.	Skywater Tech	CY23rev:	27%
<b>Qtr:</b>	3Q	<b>Grade:</b> B	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> A	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	3,434	<b>Rev:</b> ++	<b>Rev:</b> 4.1%		<b>Rev:</b>	71.6	<b>Rev:</b> +++	<b>Rev:</b> 2.6%	
<b>GM:</b>	58.5%	<b>EPS:</b> ++	<b>Fcst:</b> -4+2%		<b>GM:</b>	20.4%	<b>EPS:</b> +++	<b>Fcst:</b> +2+8%	
<b>EPS:</b>	\$3.70	<b>Fcst:</b> ++	<b>Div:</b> \$1.014		<b>EPS:</b>	(\$0.05)	<b>Fcst:</b> +++	<b>Div:</b>	
<b>ON</b>	27 est.	ON Semiconductor	CY23rev:	1%	<b>SLAB</b>	10 est.	Silicon Labs	CY23rev:	-12%
<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	2,180.8	<b>Rev:</b> +++	<b>Rev:</b> 4.1%		<b>Rev:</b>	203.8	<b>Rev:</b> +++	<b>Rev:</b> -16.8%	
<b>GM:</b>	47.3%	<b>EPS:</b> +++	<b>Fcst:</b> -11-6%		<b>GM:</b>	58.5%	<b>EPS:</b> +	<b>Fcst:</b> -66-51%	
<b>EPS:</b>	\$1.39	<b>Fcst:</b> - - -	<b>Div:</b>		<b>EPS:</b>	\$0.62	<b>Fcst:</b> - - -	<b>Div:</b>	
<b>PI</b>	6 est.	Impinj	CY23rev:	17%	<b>SMTC</b>	12 est.	Semtech	FY24rev:	18%
<b>Qtr:</b>	3Q	<b>Grade:</b> B	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	F3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	65.0	<b>Rev:</b> +	<b>Rev:</b> -24.4%		<b>Rev:</b>	200.9	<b>Rev:</b> - -	<b>Rev:</b> -15.7%	
<b>GM:</b>	50.5%	<b>EPS:</b> +++	<b>Fcst:</b> +1+5%		<b>GM:</b>	51.3%	<b>EPS:</b> ++	<b>Fcst:</b> -10-0%	
<b>EPS:</b>	\$0.00	<b>Fcst:</b> +	<b>Div:</b>		<b>EPS:</b>	\$0.02	<b>Fcst:</b> - - -	<b>Div:</b>	
<b>POWI</b>	6 est.	Power Integrations	CY23rev:	-23%	<b>SQNS</b>	2 est.	Sequans Comm	CY23rev:	-22%
<b>Qtr:</b>	3Q	<b>Grade:</b> F	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> F	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	125.5	<b>Rev:</b> - - -	<b>Rev:</b> 1.9%		<b>Rev:</b>	7.79	<b>Rev:</b> - - -	<b>Rev:</b> -15.0%	
<b>GM:</b>	53.3%	<b>EPS:</b> -	<b>Fcst:</b> -32-24%		<b>GM:</b>	85.8%	<b>EPS:</b> - - -	<b>Fcst:</b> na	
<b>EPS:</b>		<b>Fcst:</b> - - -	<b>Div:</b> \$0.20		<b>EPS:</b>	(\$0.12)	<b>Fcst:</b> na	<b>Div:</b>	
<b>PXLW</b>	3 est.	Pixelworks	CY23rev:	-16%	<b>STM</b>	9 est.	STMicroelectronics	CY23rev:	8%
<b>Qtr:</b>	3Q	<b>Grade:</b> C	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	3Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	16.0	<b>Rev:</b> o	<b>Rev:</b> 17.6%		<b>Rev:</b>	4,431	<b>Rev:</b> +++	<b>Rev:</b> 2.4%	
<b>GM:</b>	43.1%	<b>EPS:</b> +	<b>Fcst:</b> +19+31%		<b>GM:</b>	47.6%	<b>EPS:</b> +++	<b>Fcst:</b> -6+0%	
<b>EPS:</b>	(\$0.10)	<b>Fcst:</b> +	<b>Div:</b>		<b>EPS:</b>	\$1.16	<b>Fcst:</b> -	<b>Div:</b> \$0.06	
<b>QCOM</b>	21 est.	Qualcomm	FY24rev:	-1%	<b>SWKS</b>	24 est.	Skyworks	FY24rev:	5%
<b>Qtr:</b>	F4Q	<b>Grade:</b> A	<b>Growth</b> (qtr-qtr)		<b>Qtr:</b>	F4Q	<b>Grade:</b> D	<b>Growth</b> (qtr-qtr)	
<b>Rev:</b>	8,665	<b>Rev:</b> +++	<b>Rev:</b> 2.6%		<b>Rev:</b>	1,218.8	<b>Rev:</b> -	<b>Rev:</b> 13.8%	
<b>GM:</b>	55.8%	<b>EPS:</b> +++	<b>Fcst:</b> +5+14%		<b>GM:</b>	47.1%	<b>EPS:</b> +++	<b>Fcst:</b> -4+1%	
<b>EPS:</b>	\$2.02	<b>Fcst:</b> +++	<b>Div:</b> \$0.80		<b>EPS:</b>	\$2.20	<b>Fcst:</b> - - -	<b>Div:</b> \$0.68	

<b>SYNA</b>	10 est.	Synaptics	FY24rev:	-23%
<b>Qtr:</b>	F1Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	237.7	<b>Rev:</b>	++	<b>Rev:</b> 4.6%
<b>GM:</b>	53.0%	<b>EPS:</b>	++	<b>Fcst:</b> -7+5%
<b>EPS:</b>	\$0.52	<b>Fcst:</b>	-	<b>Div:</b>
<b>TSEM</b>	3 est.	TowerJazz	CY23rev:	-15%
<b>Qtr:</b>	3Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	358.2	<b>Rev:</b>	-	<b>Rev:</b> 0.3%
<b>GM:</b>	24.3%	<b>EPS:</b>	+++	<b>Fcst:</b> -7+3%
<b>EPS:</b>	\$0.54	<b>Fcst:</b>	---	<b>Div:</b>
<b>VSH</b>	4 est.	Vishay Interconnect	CY23rev:	0%
<b>Qtr:</b>	3Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	853.7	<b>Rev:</b>	---	<b>Rev:</b> -4.3%
<b>GM:</b>	27.8%	<b>EPS:</b>	+++	<b>Fcst:</b> -10-5%
<b>EPS:</b>	\$0.60	<b>Fcst:</b>	---	<b>Div:</b> \$0.10
<b>TSM</b>	5 est.	Taiwan Semi/TSMC	CY23rev:	-13%
<b>Qtr:</b>	3Q	<b>Grade:</b>	B	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	17,278	<b>Rev:</b>	++	<b>Rev:</b> 10.2%
<b>GM:</b>	54.3%	<b>EPS:</b>	+++	<b>Fcst:</b> +9+13%
<b>EPS:</b>	\$1.29	<b>Fcst:</b>	++	<b>Div:</b> \$0.096
<b>WDC</b>	19 est.	Western Digital	FY24rev:	-2%
<b>Qtr:</b>	F1Q	<b>Grade:</b>	B	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	2,750.0	<b>Rev:</b>	+++	<b>Rev:</b> 2.9%
<b>GM:</b>	4.1%	<b>EPS:</b>	+++	<b>Fcst:</b> +4+11%
<b>EPS:</b>	(\$1.76)	<b>Fcst:</b>	+	<b>Div:</b> \$0.50
<b>TXN</b>	24 est.	Texas Instruments	CY23rev:	-10%
<b>Qtr:</b>	3Q	<b>Grade:</b>	F	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	4,532	<b>Rev:</b>	---	<b>Rev:</b> 0.0%
<b>GM:</b>	62.1%	<b>EPS:</b>	-	<b>Fcst:</b> -13-6%
<b>EPS:</b>	\$1.85	<b>Fcst:</b>	---	<b>Div:</b> \$1.30
<b>WOLF</b>	15 est.	Wolfspeed	FY24rev:	4%
<b>Qtr:</b>	F1Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	197.4	<b>Rev:</b>	--	<b>Rev:</b> -16.3%
<b>GM:</b>	15.6%	<b>EPS:</b>	+++	<b>Fcst:</b> -3+13%
<b>EPS:</b>	(\$0.53)	<b>Fcst:</b>	--	<b>Div:</b>
<b>UMC</b>	2 est.	United Micro	CY23rev:	-24%
<b>Qtr:</b>	3Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	1,769	<b>Rev:</b>	+	<b>Rev:</b> -2.2%
<b>GM:</b>	35.9%	<b>EPS:</b>	+++	<b>Fcst:</b> -5%
<b>EPS:</b>	\$0.20	<b>Fcst:</b>	-	<b>Div:</b> \$0.034
<b>XPER</b>	4 est.	Xperi	CY23rev:	5%
<b>Qtr:</b>	3Q	<b>Grade:</b>	D	<b>Growth (qtr-qtr)</b>
<b>Rev:</b>	130.4	<b>Rev:</b>	++	<b>Rev:</b> 2.8%
<b>GM:</b>	79.8%	<b>EPS:</b>	+	<b>Fcst:</b> +3+14%
<b>EPS:</b>	(\$0.08)	<b>Fcst:</b>	-	<b>Div:</b> \$0.05

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