July 24, 2024

## NXPI 2Q In-Line, 2H Recovery Underway but a Bit Shallower

NXPI	22 est.	NXP Semi		CY24rev: -1%
Qtr:	2Q	Grade:	D	<b>Growth</b> (qtr-qtr)
Rev:	3,127	Rev:	+	<b>Rev:</b> 0.0%
GM:	58.6%	EPS:	-	<b>Fcst:</b> +1+7%
EPS:	\$3.20	Fcst:		<b>Div:</b> \$1.014

**NXP Semiconductors** (NXPI \$262.30 -\$21.51 on 7/23/24)

**2Q Earnings:** NXPI announced sequentially flat 2Q earnings consistent with guidance and expectations early-Tuesday. 2Q reflects a trough as growth resumes 2H24, but the recovery profile is shallower than previously expected with an expected annual revenue decline in the low-single digit range rather than flat.

**2Q Results:** Flat revenue of \$3.1B was consistent with the midpoint of guidance across all end-markets while non-GAAP operating expenses were \$5M below the mid-point due to less hiring. Channel inventory edged up to 1.7 months from 1.6 but remains well below its long-term target of 2.5 as the company continues to bleed channel and customer inventory. Operating cash flow was \$761M, cap ex was \$184M or 6% of sales, \$260M was paid in dividends and \$310M-worth of shares were repurchased.

Singapore Manufacturing: VisionPower Semiconductor Manufacturing Company (VSMC) is a joint venture 300mm wafer fab with Vanguard Semiconductor out of Taiwan based in Singapore announced last month. Phase 1 will produce 55K wafers/month in 2029 on 130-40nm technology of analog and mixed-signal power management products for automotive, industrial, consumer and mobile customers, while Phase 2 will add 45K wafers and 28nm technology. The fab will cost \$7.8B with NXP contributing \$2.8B including \$1.6B for 40% ownership and \$1.2B for capacity access, Vanguard contributing \$3.1B including \$2.4B for 60% ownership and \$700M for capacity access, with the balance in subsidies and loan guarantees from Singapore. NXP's \$2.8B will unfold from 2024-2028 with 75% in the first three years including the peak in 2025 and will be funded from operating cash flow. Precedent and background for the deal include: TSMC owns 30% of Vanguard and will license technology to the JV; TSMC and NXP have operated a 200mm JV fab in Singapore, SSMC, over the last 25 years; and last August NXP entered into 10% of a TSMC-led JV fab in Europe, ESMC.

NXP's hybrid manufacturing will benefit from \$4B in incremental annual sales, 200 basis points of gross margin, the future potential to consolidate 200mm internal capacity, and geographic resilience.

**Automotive:** Automotive revenue 2Q declined by -4% sequentially and accounted for 55% of sales. Growth this quarter is expected to be in the mid-single digits and will persist into 4Q due to customer-specific drivers led by radar from at least two Tier-1 customers and other platforms ramping production. Radar systems are chipsets that include a front-end transceiver, microprocessor and maybe Ethernet and power management. Not all customers have corrected their inventory yet as NXP continues to under-ship to demand amid a unit macro softening to -2% from flat. Nevertheless, the expected revenue decline for the product group this year has improved to the low single-digits from the high single-digits last quarter.

Automotive inventory normalization efforts began a year ago and is complicated: wide ranges of inventory levels across different customers with targets ranging from 2-12 weeks; jockeying inventories between OEMs and Tier 1's; and ever-changing targets depending on end-demand mix and magnitude. NXP is #1 in automotive processors/MCUs worldwide, including China where it emphasizes high-performance and is transferring 16nm processors manufactured by TSMC in Taiwan to TSMC's fab in Nanjing, China. 40% of its Automotive business goes through distribution, and eight of the Top 10 customers last year were Aptiv, Bosch, Continental, Denso, Hyundai, LGE Auto, Visteon, and Vitesco.

(Verbiage continues on Page 3)

## **NXPI Financials**

FYE December

FYE December			2023					20	2024		
	2021	2022	1Q	2Q	3Q	4Q	2023	1Q	2Q		
End-Market											
Automotive	5,493	6,879	1,828	1,866	1,891	1,899	7,484	1,804	1,728		
Industrial & IoT	2,410	2,713	504	578	607	662	2,351	574	616		
Mobile	1,412	1,607	260	284	377	406	1,327	349	345		
Comm Infra/Other	1,748	2,006	529	571	559	455	2,114	399	438		
Total Revenue	11,063	13,205	3,121	3,299	3,434	3,422	13,276	3,126	3,127		
non-GAAP											
Gross Profit	6,205	7,643	1,816	1,926	2,010	2,010	7,762	1,818	1,833		
Gross Margin	56.1%	57.9%	58.2%	58.4%	58.5%	58.7%	58.5%	58.2%	58.6%		
Ü									1.071		
Operating Profit	3,641	4,791	1,085	1,155	1,203	1,219	4,662	1,080	1,071		
Operating Margin	32.9%	36.3%	34.8%	35.0%	35.0%	35.6%	35.1%	34.5%	34.3%		
EPS (GAAP)	6.79	10.55	2.35	2.67	3.01	2.68	10.71	2.47	2.54		
EPS (non-GAAP)			3.19	3.43	3.70	3.71	14.01	3.24	3.20		
Dividends/Share	2 250	2 200	1.014	1.014	1 01 4	1 014	4.056	1 014	1 014		
<i>'</i>	2.250	3.380	1.014	1.014	1.014	1.014	4.050	1.014	1.014		
Shares Repurchased								1.323			
End-Market Percent											
Automotive	49.7%	52.1%	58.6%	56.6%	55.1%	55.5%	56.4%	57.7%	55.3%		
Industrial & IoT	21.8%	20.5%	16.1%	17.5%	17.7%	19.3%	17.7%	18.4%	19.7%		
Mobile	12.8%	12.2%	8.3%	8.6%	11.0%	11.9%	10.0%	11.2%	11.0%		
Comm Infra/Other	15.8%	15.2%	16.9%	17.3%	16.3%	13.3%	15.9%	12.8%	14.0%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
End-Market Growth											
Automotive		25.2%	1.3%	2.1%	1.3%	0.4%	8.8%	-5.0%	-4.2%		
Industrial & IoT		12.6%	-16.7%	14.7%	5.0%	9.1%	-13.3%	-13.3%	7.3%		
Mobile		13.8%	-36.3%	9.2%	32.7%	7.7%	-17.4%	-14.0%	-1.1%		
Comm Infra/Other		14.8%	7.1%	7.9%	-2.1%	-18.6%	5.4%	-12.3%	9.8%		
Total		19.4%	-5.8%	5.7%	4.1%	-0.3%	0.5%	-8.6%	0.0%		
Channal Bayanya											
Channel Revenue	C 225	7.261	1 401	1 (70	1.047	2.070	7 105	1 720	1 004		
Distributors	6,325	7,261	1,491	1,679	1,947	2,078	7,195	1,739	1,804		
OEM/EMS	4,587	5,775	1,594	1,596	1,463	1,310	5,963	1,355	1,294		
other	151	169	36	24	24	34	118	32	29		
Total	11,063	13,205	3,121	3,299	3,434	3,422	13,276	3,126	3,127		
Channel Percent											
Distributors	57.2%	55.0%	47.8%	50.9%	56.7%	60.7%	54.2%	55.6%	57.7%		
OEM/EMS	41.5%	43.7%	51.1%	48.4%	42.6%	38.3%	44.9%	43.3%	41.4%		
other	1.4%	1.3%	1.2%	0.7%	0.7%	1.0%	0.9%	1.0%	0.9%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Geography											
China	4,180	4,700	947	1,031	1,150	1,238	4,366	1,014	1,098		
APAC	3,471	4,165	975	958	906	902	3,741	910	898		
EMEA	2,036	2,582	725	797	866	708	3,096	743	676		
Americas	1,376	1,758	474	513	512	574	2,073	459	455		
Total	11,063	13,205	3,121	3,299	3,434	3,422	13,276	3,126	3,127		
Geography Percent											
China	37.8%	35.6%	30.3%	31.3%	33.5%	36.2%	32.9%	32.4%	35.1%		
APAC	31.4%	31.5%	31.2%	29.0%	26.4%	26.4%	28.2%	29.1%	28.7%		
EMEA	18.4%	19.6%	23.2%	24.2%	25.2%	20.7%	23.3%	23.8%	21.6%		
Americas	12.4%	13.3%	15.2%	15.6%	14.9%	16.8%	15.6%	14.7%	14.6%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
**											

Industrial and IoT: Industrial/IoT revenue 2Q grew by +7% and accounted for 20% of sales driven by consumer IoT demand in China and APAC that is expected to persist, while Europe and North America Industrial remains weak. 80% of Industrial/IoT goes through distribution serving tens of thousands of customers mostly in China and APAC. IoT is about 40% of the segment and is largely China-oriented distribution business.

Mobile: Mobile revenue 2Q declined by -1% and accounted for 11% of sales, although sequential growth in the mid-teen's percent is expected this quarter. Samsung and Apple were Top 10 customers last year.

Communication Infrastructure and Other: Comm/Other revenue 2Q grew by +10% and accounted for 14% of sales but is expected to decline in the mid-single digit range this quarter. At the end of last year 50% of this segment consisted of secure cards which includes payment cards, transport cards, RFID and security; 30% legacy digital networking processors where select end-of-life products continue to generate cash; and 20% RF power for mobile base stations on a lumpy downward trend. The RFID within secure cards continues to grow but is more than offset by declines across the rest of this business.

**30 Guidance** (non-GAAP): 3Q revenue at \$3.25B +/-\$100M with Automotive up in the mid-single digits, Industrial/IoT up, Mobile up in the mid-teens, and Comm/Other down in the mid-single digits. Gross margin 58.5% +/-50 basis points down a bit due to product mix despite higher revenue, operating expenses \$760M +/- \$10M, operating margin 35.1% (34.2-36.0%), financial expense \$67M, tax rate 16.8% (16.3-17.3%), non-controlling interest (\$9M), 258.5M shares, cap ex at 6%, and EPS of 3.42 (\$3.21-\$3.63).

While 2H24 sequential quarterly growth has begun, 2024 revenue is now expected to be down in the low single digits rather than flat due to slower than expected automotive inventory digestion and continued Industrial market weakness in Europe and North America. Factory utilization (40% of wafers are internal) will stay in the low-70% range until inventory normalizes; the company plans to expand its distribution customer reach and will raise inventory months up to 1.8 from 1.7 amid increasing confidence of the forthcoming recovery; and will keep returning all excess free cash flow to shareholders.

Valuation: On a TTM, current and next FY basis, price/sales is at 5.2x, 5.2x and 4.8x, respectively, while price/earnings is at 18.9x, 18.9x and 16.5x on expected sales and earnings growth next year. Price/book is at 7.5x but swings negative on a tangible basis and the company's debt drives net cash negative, although free cash flow is positive and the company continues to repurchase shares. Valuation metrics appear generally consistent with current expectations with incremental upside potential primarily depending on growth from automotive, in my opinion.

> -Dan K. Scovel Semiconductor Analyst

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LEGEND							
	+++	exceeded the high-end of the range	Grade				
	++	above consensus, within the high-end of the range	Α	all +++			
	+	slightly above consensus	В	all +			
	0	met consensus	С	all o/+			
	-	slightly below consensus	D	mixed -/o/+			
		missed consensus, within the low-end of the range	Ε	all o/-			
		missed the low-end of the range	F	all -			

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