All Other operating loss - The year-on-year decrease was due to the $1.4 billion Arm acquisition termination cost in fiscal year 2023, partially offset by a $839 million increase in stock-based compensation expense in fiscal year 2024.

Concentration of Revenue

Revenue by geographic region is designated based on the billing location even if the revenue may be attributable to end customers, such as enterprises and gamers in a different location. Revenue from sales to customers outside of the United States accounted for 56% and 69% of total revenue for fiscal years 2024 and 2023, respectively.

Our direct and indirect customers include public cloud, consumer internet companies, enterprises, startups, public sector entities, OEMs, ODMs, system integrators, AIB, and distributors.

Sales to one customer, Customer A, represented 13% of total revenue for fiscal year 2024, which was attributable to the Compute & Networking segment.

One indirect customer which primarily purchases our products through system integrators and distributors, including through Customer A, is estimated to have represented approximately 19% of total revenue for fiscal year 2024, attributable to the Compute & Networking segment.

Our estimated Compute & Networking demand is expected to remain concentrated.

There were no customers with 10% or more of total revenue for fiscal years 2023 and 2022.

Gross Profit and Gross Margin

Gross profit consists of total revenue, net of allowances, less cost of revenue. Cost of revenue consists primarily of the cost of semiconductors, including wafer fabrication, assembly, testing and packaging, board and device costs, manufacturing support costs, including labor and overhead associated with such purchases, final test yield fallout, inventory and warranty provisions, memory and component costs, tariffs, and shipping costs. Cost of revenue also includes acquisition-related costs, development costs for license and service arrangements, IP-related costs, and stock-based compensation related to personnel associated with manufacturing operations.

Our overall gross margin increased to 72.7% in fiscal year 2024 from 56.9% in fiscal year 2023. The year over year increase was primarily due to strong Data Center revenue growth of 217% and lower net inventory provisions as a percentage of revenue.

Provisions for inventory and excess inventory purchase obligations totaled $2.2 billion for both fiscal years 2024 and 2023. Sales of previously reserved inventory or settlements of excess inventory purchase obligations resulted in a provision release of $540 million and $137 million for fiscal years 2024 and 2023, respectively. The net effect on our gross margin was an unfavorable impact of 2.7% and 7.5% in fiscal years 2024 and 2023, respectively.

Operating Expenses

	Year Ended			
	Jan 28, 2024	Jan 29, 2023	$ Change	% Change
	($ in millions)			
Research and development expenses	$ 8,675	$ 7,339	$ 1,336	18 %
% of net revenue	*14.2 %*	*27.2 %*		
Sales, general and administrative expenses	2,654	2,440	214	9 %
% of net revenue	*4.4 %*	*9.1 %*		
Acquisition termination cost	—	1,353	(1,353)	(100)%
% of net revenue	*— %*	*5.0 %*		
Total operating expenses	$ 11,329	$ 11,132	$ 197	2 %
% of net revenue	*18.6 %*	*41.3 %*		

The increase in research and development expenses and sales, general and administrative expenses for fiscal year 2024 was primarily driven by compensation and benefits, including stock-based compensation, reflecting employee growth and compensation increases.

Acquisition Termination Cost

We recorded an acquisition termination cost related to the Arm transaction of $1.4 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.