

The following region accounted for at least 30 percent of total net sales for the Semiconductor Systems segment for one or more of past three fiscal years:

										Change					
2019				2018		2017		2019 over 2018		2018 over 2017					
(In millions, except percentages)															
Korea	\$	1,435	16 %	\$	2,883	27 %	\$	2,955	31 %	\$	(1,448)	(50)%	\$	(72)	(2)%

### Applied Global Services Segment

The Applied Global Services segment provides integrated solutions to optimize equipment and fab performance and productivity, including spares, upgrades, services, certain remanufactured earlier generation equipment and factory automation software for semiconductor, display and solar products.

Demand for Applied Global Services' service solutions are driven by Applied's large and growing installed base of manufacturing systems, and customers' needs to shorten ramp times, improve device performance and yield, and optimize factory output and operating costs. Industry conditions that affect Applied Global Services' sales of spares and services are primarily characterized by increases in semiconductor manufacturers' wafer starts and continued strong utilization rates, growth of the installed base of equipment, growing service intensity of newer tools, and the company's ability to sell more comprehensive service agreements.

Certain significant measures for the periods indicated were as follows:

	2019		2018		2017		Change					
							2019 over 2018		2018 over 2017			
	(In millions, except percentages and ratios)											
Net sales	\$	3,854	\$	3,754	\$	3,014	\$	100	3 %	\$	740	25 %
Operating income	\$	1,101	\$	1,102	\$	817	\$	(1)	— %	\$	285	35 %
Operating margin		28.6 %		29.4 %		27.1 %		(0.8) points			2.3 points	

Net sales increased slightly in fiscal 2019 compared to the prior year primarily due to higher customer spending for comprehensive service agreements and legacy systems, partially offset by lower customer spending on semiconductor spares. Net sales increased in fiscal 2018 compared to fiscal 2017 primarily due to higher customer spending for spares and services. In fiscal 2019, two customers each accounted for at least 10 percent of this segment's net sales.

Operating income for fiscal 2019 remained flat compared to the prior year primarily due to higher net sales, partially offset by higher expenses related to an increase in headcount. Operating margin for fiscal 2019 decreased slightly compared to fiscal 2018 primarily due to an increase in headcount to support revenue growth. Operating income and operating margin for fiscal 2018 increased compared to the fiscal 2017, reflecting higher net sales partially offset by increased headcount to support business growth.

There was no single region that accounted for at least 30 percent of total net sales for the Applied Global Services segment for any of the past three fiscal years.