

# #AVNETSILICA



Avnet Silica



Technology



Innovation

# Linecard

## Supplier and Technology Portfolio



# Avnet Silica Portfolio



# Technology Linecards

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# Analog Signal Chain

## Technology Linecard

	Switch and Mux	Op Amps & Comparators	Current Sense Amps	Digital Pots	ADCs & DACs	Analog Signal Conditioners	Audio/Video Processing	Voltage References
Analog Devices	•	•	•	•	•	•	•	•
Cirrus Logic		•			•	•	•	
Diodes		•	•					•
Intersil	•	•	•	•	•		•	•
Maxim Integrated	•	•	•	•	•	•	•	•
Microchip		•	•	•	•			
Monolithic Power Systems	•	•	•				•	•
NXP	•					•	•	
ON Semiconductor	•	•		•		•		•
Renesas Electronics		•			•		•	
Semtech	•						•	•
Silicon Labs		•	•		•		•	•
STMicroelectronics	•	•	•			•	•	•
Texas Instruments	•	•	•	•	•	•	•	•



Avnet Silica also supports:



# MCU | MPUs

## Technology Linecard

### MCU MPU

	MCU	Wireless MCU	MPU
Analog Devices	•		
Applied Micro			•
Atmel	•	•	•
Cypress Semiconductor	•	•	
Infineon	•	•	
Intel			•
Marvell	•	•	•
Maxim Integrated	•		
Microchip	•		
Nordic Semiconductor	•	•	
NXP	•	•	•
ON Semiconductor	•	•	
Renesas Electronics	•	•	•
Silicon Labs	•	•	
STMicroelectronics	•	•	
Texas Instruments	•	•	•
Xilinx			•

### Other

	Other 8 Bits Core	Other 16 Bits Core	Other 32 Bits Core
Atmel	AVR		AVR
Cypress Semiconductor	8051		
Infineon	8051	C166	Tricore
Maxim Integrated	8051	MAXQ	
Microchip	PIC		MIPS
NXP			Power Architecture
ON Semiconductor	LC87, 8051		
Renesas Electronics		RL78	RX100/200/600/700 V850, RH850
Silicon Labs	8051		
STMicroelectronics	STM8		
Texas Instruments			MSP430

## ARM®

	ARM7	ARM9	ARM Cortex-A5	ARM Cortex-A7	ARM Cortex-A8	ARM Cortex-A9	ARM Cortex-A15	ARM Cortex-A53	ARM Cortex-A57	ARMv7-A Compatible	ARM Cortex-R4	ARM Cortex-R5	ARM Cortex-M0+	ARM Cortex-M3	ARM Cortex-M4	ARM Cortex-M4F	ARM Cortex-M7
Analog Devices	•												•				
Atmel	•	•	•									•	•	•	•	•	
Cypress Semiconductor									•	•		•	•	•			
Infineon											•		•	•	•		
Marvell					•	•	•										
Maxim Integrated		•											•	•	•		
Nordic Semiconductor										•						•	
NXP	•	•	•	•	•	•	•	•	•			•	•	•	•	•	
ON Semiconductor											•		•				
Renesas Electronics						•						•	•	•	•	•	
Silicon Labs												•	•	•	•		
STMicroelectronics											•	•	•	•	•	•	
Texas Instruments				•	•	•				•	•		•		•		
Xilinx						•		•			•						



Avnet Silica also supports:



# Memory

## Technology Linecard

	DRAM	NAND			NOR	MCP	SRAM	E2PROM	NVRAM
		Raw NAND	Mngd NAND	Solid State Storage					
Atmel	SDRAM DDR DDR2 DDR3 DDR4 GDDR5 RLDRAM Memory LPDRAM DRAM Modules Hybrid Memory Cube	TLC NAND MLC NAND SLC NAND Serial NAND Embedded USB Embedded Multimedia Card SD Card 2.5" mSATA M.2	NAND BCA Drive Parallel NOR Flash Serial NOR Flash Octal NOR Flash NOR-Based MCP NAND-Based MCP	Asynchronous SRAM Synchronous SRAM Synchronous DDR SRAM Synchronous QDR SRAM Synchronous NORL SRAM Low Power SRAM	Parallel EEPROM Serial EEPROM	Parallel iNVRAM Serial iNVRAM Parallel FRAM Serial FRAM MRAM			
Cypress Semiconductor			•	•	•	•	•	•	•
GSI Technology		•				•	•		
Intel				• • •					
Macronix		• •		• • •			• •		
Microchip				• •	•		•	•	
Micron	• • • • • • • • • • • • • • • •		• • • •	• • •					
ON Semiconductor			•		•		•	•	•
Renesas Electronics					• • • •	• •	• •		
Sandisk		• •	• • • •						
STMicroelectronics						• •			



Avnet Silica also supports:



# Power

## Technology Linecard

	High Power WBG (SiC, GaN)	Bipolar Transistors	MOSFETs	IGBTs	MOSFET Modules	IGBT Modules	IPM Modules	Diodes	Thyristors	Thyristor/Diode Modules	AC/DC Offline	Power Factor Controllers	Linear & LDO Regulators	DC/DC Controllers	DC/DC Converters	PMIC	DC/DC Modules	Voltage References	Gate Drivers	LED Drivers & Controllers	Special Power Functions*	Power Over Ethernet/USB	Digital Power	Battery Management	Motion Control	RF Power	Wireless Charging	Power Magnetics	EMI/RFI/LC Filters
Analog Devices*											•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•		
Coilcraft											X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	•	•	
Dialog Semiconductor											•					•													
Diodes	•	•						•				•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Infineon	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Intersil											•	•	•	•	•	•	•		•	•	•	•	•	•	•				
Maxim Integrated											•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Microchip			•									•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Monolithic Power Systems												•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	
NXP			•									•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
ON Semiconductor	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Renesas Electronics	•	•	•	•	•	•							•																
Semtech							•						•	•	•	•			•	•	•	•	•	•	•	•	•	•	
Silicon Labs																			•			•							
STMicroelectronics*	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	
Texas Instruments			•									•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
WeEn	•	•																											

x associated components  
\*not Pan-European



Avnet Silica also supports:



# Sensors

## Technology Linecard

	Environment						Motion						HMI & Others				
	Temperature	Light/Proximity	Pressure	Humidity	Gas/Smoke	Ultrasonic	Axis Sensors		Speed/Position				Encoder	Current	Touch Sense IF	Image	PIR Controllers
							Accelerometer	Gyroscope	Compass	Hall	Magnetic	Optical					
Allegro	•							•	•	•	•		•*		•		•
Analog Devices																	
Atmel																	
Cirrus Logic								•									
Coilcraft																	
Cypress Semiconductor																	
Diodes	•									•	•						
Infineon		•								•	•			•			•
Intersil	•									•	•						
Maxim Integrated	•	•		•		*							•*	•			•
Microchip	•			*	*	*								*	•		•
Monolithic Power Systems											•						
NXP	•		•					•	•	•	•						
ON Semiconductor	•	•												•	•	•	*
Semtech																	
Silicon Labs	•	•		•					•		•					•	•
STMicroelectronics	•	•	•	•				•	•	•						•	•
TD next																	
Texas Instruments	•	•	*	•	*	*				•		*	*	*	•	•	*

\*signal conditioning only



Avnet Silica also supports:



# Wireless

## Technology Linecard

	NFC/RFID	Sub 1 GHz	Zigbee	Thread	Proprietary 2.4 GHz	Bluetooth	WiFi	Cellular	Location	SigFox	LoRa	Antennas
Analog Devices	C											
Atmel	C	C	CM		C	CM	C			C		
Cypress Semiconductor							CM					
Huawei (inc. Neul)								M				
Infineon	C											
Marvell	C		C	C		C	C		C			
Microchip	CM	CM			CM	CM	CM				M	
Nordic Semiconductor	C				C	C						
NXP	C	C	CM	C	CM	C						
ON Semiconductor		CM			C					CM		
Quectel								M	M			
Renesas Electronics						C						
Semtech	C	C			C						C	
Sierra Wireless							M					
Silicon Labs	C	CM	CM	CM	CM	CM	M					
STMicroelectronics	C	CM				CM	M		C	C	C	
TD next	M									M		
Texas Instruments	C	C	C		C	CM	CM		C		Y	

C = Chip  
M = Modules



Avnet Silica also supports:



# Programmable & System on Chip (SoC) Technology Linecard

	Programmable Technology	Technology (Flash/SRAM)	Low Power Capabilities	Low Density FPGA (up to 150K LE)	Mid Density FPGA (up to 500K LE)	High Density FPGA (up to 2M LE)	Ultra-High Density FPGA (up to 5.5M LE)	Defense-Grade FPGA	Space-Grade FPGA	Automotive-Grade FPGA	DSP	Multi Gb/s Serial I/O	PCIe	ARM Cortex-A9 Processor (up to)	ARM Cortex-A53 Processor (up to)	ARM Cortex-R5 Processor (up to)	GPU	H.265 Video CODEC
Xilinx	Virtex-5 QV	65nm SRAM	•			•		•	•	•								
	Spartan-6	45nm SRAM	•	•				•	•	•	•	•	Gen1x1					
	Artix-7	28nm SRAM	•	•	•			•	•	•	•	•	Gen2x4					
	Kintex-7	28nm SRAM			•			•			•	•	Gen2x8					
	Virtex-7	28nm SRAM				•		•			•	•	Gen3x8					
	Kintex UltraScale	20nm SRAM				•					•	•	Gen3x8					
	Virtex UltraScale	20nm SRAM					•				•	•	Gen3x8					
	Kintex UltraScale +	16nm SRAM					•				•	•	Gen3x16/ Gen4x8					
	Virtex UltraScale +	16nm SRAM						•			•	•	Gen3x16/ Gen4x8					
	Zynq-7000	28nm SRAM	•	•				•		•	•	•	Gen2x4/ Gen2x8	2x				
	Zynq UltraScale +	16nm SRAM		•	•						•	•	Gen2x4/ Gen3x16/ Gen4x8	4x	2x	Mali 400MP	•	



# Lighting Technology Linecard

## LEDs

	Low Power	Mid Power	High Power		COBs	High Voltage
	<0,3 W	0,3 - 0,9 W	1 - 4 W	4 - 10 W		
Lumileds	•	•	•	•	•	•
Seoul Semiconductors	•	•	•	•	•	•
Sharp Microelectronics					•	
ROHM Semiconductor	•	•	•			

## Optics

Carclo	•	•	•	•	•	•
Gaggione		•	•	•	•	•
LEDiL	•	•	•	•	•	•

## Holders \*

Molex				•	•
TE Connectivity				•	•

## Power \*

	Power (in W)	Topology	Indoor	Outdoor	Dimming Options	Programmable	Wireless
Aimtec	5 - 150 W	CC, CC/CV		•	AC, 0-10V, R, PWM		
Delta Electronics	7 - 320 W	CC, CV	•	•	AC, 0-10V, R, DALI	•	
Lumotech	5 - 150 W	CC, CV	•	•	AC, 0-10V, R, PWM, DALI	•	
Mean Well	8 - 600 W	CC, CV, CC/CV	•	•	AC, 0-10V, R, PWM, DALI	•	•
Moons	12 - 320 W	CC, CV	•	•	AC, 0-10V, R, PWM, DALI, DMX	•	•

## Thermal Management \*

	Low Power	Mid Power	High Power		COBs	High Voltage
	<0,3 W	0,3 - 0,9 W	1 - 4 W	4 - 10 W		
3M		•	•	•	•	•
Aavid Thermalloy			•	•	•	•
Fischer Elektronik			•	•	•	•
Laird		•	•	•	•	•
Mechatronics			•	•	•	•

\*supported by Avnet Abacus

# Lighting Technology Linecard

## Connectors (Power and Signal) \*

Amphenol FCI	Hirose	Samtec
AVX	Molex	TE Connectivity

\*supported by Avnet Abacus

## LED Drivers

Analog Devices	Maxim Integrated	ROHM Semiconductor
Diodes	NXP	STMicroelectronics
Infineon	ON Semiconductor	Texas Instruments

## LEDs



## Optics



## COB Holders



## Power



## Thermal Management



## Connectors



## LED Drivers



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