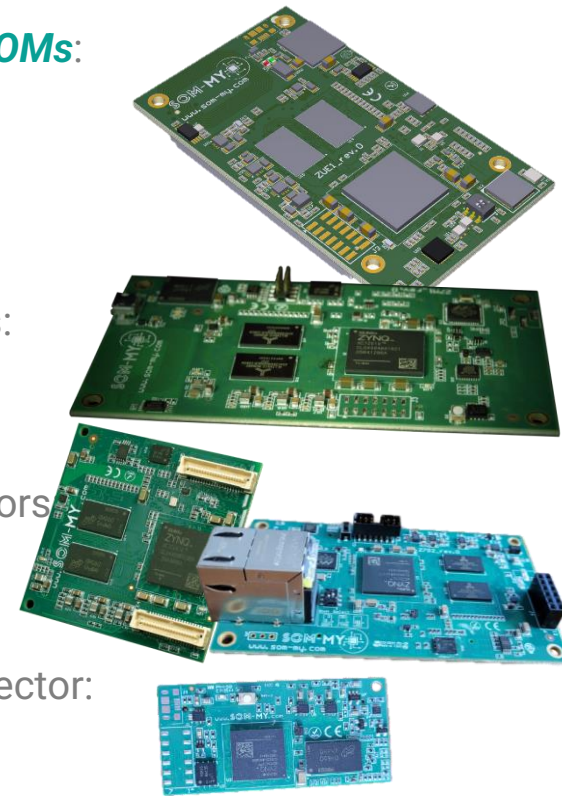




- Comprehensive product offer, scalable according to application **SOMs**:
 - **E1** family: standard footprint (3,50"x2,00") – 3 I/O connectors:
 - Available with Xilinx **ZynqUltrascale+**
 - Avnet Silica **UltraZed** compatible pins
 - **M1** family: standard footprint (4,00"x2,25") – 3 I/O connectors:
 - Available with Xilinx **Zynq**
 - Avnet Silica **PicoZed** compatible pins
 - **S1/S2** family: compact footprint (2,25"x2,25") – 2 I/O connectors:
 - Available with Xilinx **Zynq**, **Artix**, **Spartan** FPGAs
 - Avnet Silica **MicroZed** compatible pins
 - **N1** family: super compact footprint (1,25"x2,25") – 1 I/O connector:
 - Available with Xilinx **Zynq** single core SoCs
 - Size and consumption focused to on-the-edge IoT solutions





PRODUCT SELECTION GUIDE: Modules

MODEL ⁽¹⁾	PROCESSOR SYSTEM			PROGR. LOGIC			ON-BOARD MEMORY			ON-BOARD PERIPHERALS			JX1/JX2/JX3 I/O			Tgrade (°C)	DIM. (inches)	AVNET compatibility
	Cpu	Core	f(Mhz)	LC	Bram	DSP	flash	DDR3	eMMC	ETH	USB	Vcom	PL	PS	GT			
Z7M1-10-1C	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB	v	v	-	100	20	-	0/+70	4.00x2.25	PicoZED
Z7M1-10-1I	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB	v	v	-	100	20	-	-40/+85	4.00x2.25	PicoZED
Z7M1-10-2I	Cortex-A9	dual	766	28k	60	80	128Mb	1GB	8GB	v	v	-	100	20	-	-40/+85	4.00x2.25	PicoZED
Z7M1-20-1C	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB	v	v	-	125	20	-	0/+70	4.00x2.25	PicoZED
Z7M1-20-1I	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB	v	v	-	125	20	-	-40/+85	4.00x2.25	PicoZED
Z7M1-20-3E	Cortex-A9	dual	866	85k	140	220	128Mb	1GB	8GB	v	v	-	125	20	-	0/+85	4.00x2.25	PicoZED
Z7M1-10-D-1C	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB	v	v	v	100	20	-	0/+70	4.00x2.25	PicoZED
Z7M1-20-D-1C	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB	v	v	v	125	20	-	0/+70	4.00x2.25	PicoZED
Z7M1-12-1C	Cortex-A9	single	667	55k	72	120	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	0/+70	4.00x2.25	PicoZED
Z7M1-12-1I	Cortex-A9	single	667	55k	72	120	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	-40/+85	4.00x2.25	PicoZED
Z7M1-15-1C	Cortex-A9	dual	667	74k	95	160	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	0/+70	4.00x2.25	PicoZED
Z7M1-15-1I	Cortex-A9	dual	667	74k	95	160	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	-40/+85	4.00x2.25	PicoZED
Z7M1-30-1C	Cortex-A9	dual	667	125k	265	400	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	0/+70	4.00x2.25	PicoZED
Z7M1-30-1I	Cortex-A9	dual	667	125k	265	400	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	-40/+85	4.00x2.25	PicoZED
Z7M1-30-2I	Cortex-A9	dual	766	125k	265	400	128Mb	1GB	8GB	v	v	v ⁽²⁾	135	20	4	-40/+85	4.00x2.25	PicoZED
ZUE1-1C-1I	Cortex-A53 ⁽³⁾	dual	1300	82k	108	216	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	-40/+85	3.50x2.00	UltraZED
ZUE1-1E-1I	Cortex-A53 ⁽³⁾	quad	1500	82k	108	216	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	-40/+85	3.50x2.00	UltraZED
ZUE1-3C-1E	Cortex-A53 ⁽³⁾	dual	1300	154k	216	360	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	0/+85	3.50x2.00	UltraZED
ZUE1-3C-1I	Cortex-A53 ⁽³⁾	dual	1300	154k	216	360	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	-40/+85	3.50x2.00	UltraZED
ZUE1-3E-1E	Cortex-A53 ⁽³⁾	quad	1500	154k	216	360	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	0/+85	3.50x2.00	UltraZED
ZUE1-3E-1I	Cortex-A53 ⁽³⁾	quad	1500	154k	216	360	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	-40/+85	3.50x2.00	UltraZED
ZUE1-3E-2I	Cortex-A53 ⁽³⁾	quad	1500	154k	216	360	512Mb	2GB ^(DDR4)	8GB	v	v	-	180	26	4 ⁽⁴⁾	-40/+85	3.50x2.00	UltraZED

⁽¹⁾ custom versions available combining different features, different color also available

⁽²⁾ feature available through external uart-to-usb converter

⁽³⁾ also with Arm Cortex-RF5 dual-core

⁽⁴⁾ PS GTR transceiver



MODEL ⁽¹⁾	PROCESSOR SYSTEM			PROGR. LOGIC			ON-BOARD MEMORY			ON-BOARD PERIPHERALS							JX1/JX2 I/O			Tgrade (°C)	DIM. (inches)	AVNET comp. ⁽⁷⁾
	Cpu	Core	f(Mhz)	LC	Bram	DSP	flash	DDR3	eMMC	ETH	USB	uSD	Vcom	WiFi	NFC	LTE ⁽⁶⁾	PL	PS	GT			
A7S1-15-00	-	-	-	16k	50	48	128Mb	-	-	-	-	-	-	-	-	100	-	-	0/+70	2.25x2.25	-	
A7S1-15-1C	-	-	-	16k	50	48	128Mb	512MB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	-	-	0/+70	2.25x2.25	-
A7S1-15-11	-	-	-	16k	50	48	128Mb	512MB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	-	-	-40/+85	2.25x2.25	-
A7S1-75-1C	-	-	-	75k	210	180	128Mb	512MB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	-	-	0/+70	2.25x2.25	-
A7S1-100-1C	-	-	-	101k	270	240	128Mb	512MB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	-	-	0/+70	2.25x2.25	-
Z7S1-7S-00	Cortex-A9	single	667	23k	50	66	128Mb	-	-	-	-	-	-	-	v ⁽²⁾	v ⁽⁴⁾	100	-	-	0/+70	2.25x2.25	-
Z7S1-7S-1C	Cortex-A9	single	667	23k	50	66	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	35	-	0/+70	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-7S-11	Cortex-A9	single	667	23k	50	66	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	35	-	-40/+85	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-10-1C	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	35	-	0/+70	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-10-21	Cortex-A9	dual	766	28k	60	80	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	35	-	-40/+85	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-10-1Q	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	100	35	-	-40/+125	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-20-1C	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	115	35	-	0/+70	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-20-3E	Cortex-A9	dual	866	85k	140	220	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	115	35	-	0/+85	2.25x2.25	MicroZED ⁽⁷⁾
Z7S1-20-11	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB ^(2,3)	v ⁽²⁾	-	v ^(2,3,4)	v ^(2,3,4)	v ⁽³⁾	v ⁽²⁾	v ⁽⁴⁾	115	35	-	-40/+85	2.25x2.25	MicroZED ⁽⁷⁾
Z7S2-10-1C	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB	v	v	v	v	-	-	-	100	8	-	0/+70	4.00x2.25	MicroZED
Z7S2-10-11	Cortex-A9	dual	667	28k	60	80	128Mb	1GB	8GB	v	v	v	v	-	-	-	100	8	-	-40/+85	4.00x2.25	MicroZED
Z7S2-20-1C	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB	v	v	v	v	-	-	-	115	8	-	0/+70	4.00x2.25	MicroZED
Z7S2-20-11	Cortex-A9	dual	667	85k	140	220	128Mb	1GB	8GB	v	v	v	v	-	-	-	115	8	-	-40/+85	4.00x2.25	MicroZED
Z7S2-20-21	Cortex-A9	dual	766	85k	140	220	128Mb	1GB	8GB	v	v	v	v	-	-	-	115	8	-	-40/+85	4.00x2.25	MicroZED
Z7S2-20-3E	Cortex-A9	dual	866	85k	140	220	128Mb	1GB	8GB	v	v	v	v	-	-	-	115	8	-	0/+85	4.00x2.25	MicroZED
Z7N1-7S-00	Cortex-A9	single	667	23k	50	66	128Mb	-	-	-	-	-	-	-	-	-	46	12	-	0/+70	2.25x1.12	-
Z7N1-7S-1C	Cortex-A9	single	667	23k	50	66	128Mb	512MB	4GB	-	-	-	-	v ⁽⁵⁾	-	-	46	12	-	0/+70	2.25x1.12	-
Z7N1-7S-11	Cortex-A9	single	667	23k	50	66	128Mb	512MB	4GB	-	-	-	-	v ⁽⁵⁾	-	-	46	12	-	-40/+85	2.25x1.12	-
Z7N1-10-11	Cortex-A9	single	667	23k	50	66	128Mb	512MB	4GB	-	-	-	-	v ⁽⁵⁾	-	-	46	12	-	-40/+85	2.25x1.12	-
Z7N1-7S-D-1C	Cortex-A9	single	667	23k	50	66	128Mb	512MB	4GB	-	-	-	v	v ⁽⁵⁾	-	-	46	12	-	0/+70	2.25x1.12	-

⁽¹⁾ custom versions available combining different features, different color also available

⁽²⁾ feature available on "EXP1" add-on board for S1 family

⁽³⁾ feature available on "EXP2" add-on board for S1 family

⁽⁴⁾ feature available on "EXP3" add-on board for S1 family

⁽⁵⁾ feature available on "EXP4" add-on board for N1 family

⁽⁶⁾ the LTE option includes Quectel 4G/LTE module with GPS

⁽⁷⁾ see compatibility table



EXPANSIONS for S1 family

Model ⁽¹⁾	Gbit ETH ⁽²⁾	microSD	VCOM ⁽³⁾	WiFi ⁽⁴⁾	NFC Tag ⁽⁵⁾	LTE&GPS ⁽⁶⁾	Tgrade (°C)	DIM. (inches)	NOTE	PRICE (€)
S1-EXP-1C	V	V	V	-	V	-	0/+70	2.25x2.25		48.00
S1-EXP-1I	V	V	V	-	V	-	-40/+85	2.25x2.25		56.00
S1-EXP-2PB	-	V	V	V	-	-	-40/+85	2.25x2.25	WiFi pcb antenna	50.00
S1-EXP-2UB	-	V	V	V	-	-	-40/+85	2.25x2.25	Wifi U.FL antenna	50.00
S1-EXP-3I	-	V	V	-	-	V	-40/+85	2.25x2.25		95.00

⁽¹⁾ expansion boards connected to Som-my through JX4 and JX5 connectors

⁽²⁾ RJ-45 connector with yellow and green is on board

⁽³⁾ Virtual COM uses FTDI UART-2-USB converter, micro USB connector is on board

⁽⁴⁾ WiFi module is Microchip ATWILC1000 802.11b/g/n compliant, soft-AP mode supported

⁽⁵⁾ NFC Tag with 13.56MHz pcb antenna and 4Kbit e2prom memory accessible from Som-my I2C bus

⁽⁶⁾ connectors for Main antenna, Diversity antenna and GNSS antenna are U.FL type

EXPANSIONS for N1 family

Model ⁽¹⁾	Gbit ETH	microSD	VCOM ⁽³⁾	WiFi ⁽⁴⁾	NFC Tag	LTE&GPS	Tgrade (°C)	DIM. (inches)	NOTE	PRICE (€)
N1-EXP-4PB	-	-	V	V	-	-	-40/+85	2.25x1.2	WiFi pcb antenna	35.00
N1-EXP-4UB	-	-	V	V	-	-	-40/+85	2.25x1.2	Wifi U.FL antenna	35.00

⁽¹⁾ expansion boards connected to Som-my through PMOD connector

⁽³⁾ Virtual COM uses FTDI UART-2-USB converter and micro USB connector

⁽⁴⁾ WiFi module is Microchip ATWILC1000 802.11b/g/n compliant, soft-AP mode supported

KITS & CARRIER BOARDS

Model	JTAG connector	External Psupply	microSD connector	VCOM ⁽²⁾ Uart-to-USB	Gbit ETH connector	Gbit ETH transceiv.	USB-A 2.0 connector	USB 2.0 ULPI	HDMI connector	8GB eMMC	PMOD connector	PL I/O on strip	DIM. (mm)	PRICE (€)
A7-IOEXP-ST	V	V	V	V	-	-	-	-	-	-	V ⁽⁷⁾	-	57x57	75.00
Z7-IOEXP-ST	V	V	V	V	V	V	-	-	-	V	V ⁽⁸⁾	-	57x57	75.00
A7-MYCC-S1	V	V ⁽¹⁾	-	V	-	-	-	-	V ⁽⁴⁾	-	V ⁽⁹⁾	100	160x100	80.00
Z7-MYCC-S1	V	V ⁽¹⁾	-	V	-	-	V	V	V ⁽⁵⁾	-	V ⁽⁹⁾	100	160x100	88.00
Z7-MYCC-M1	V	V ⁽¹⁾	V	V	V	⁽³⁾	V	⁽⁴⁾	V ⁽⁵⁾	-	-	100	160x100	98.00
Z7-MYCC-N1	V	V ⁽¹⁾	-	V	-	-	-	-	V ⁽⁵⁾	-	-	46	160x100	64.00

⁽¹⁾ Bank supply voltage selectable

⁽²⁾ Virtual COM uses FTDI UART-2-USB converter and micro USB connector

⁽³⁾ Gbit Ethernet transceiver is on Z7M1 module

⁽⁴⁾ USB ULPI 2.0 High-Speed is on Z7M1 module

⁽⁵⁾ HDMI connector is directly connected to PL Bank14

⁽⁶⁾ HDMI connector is directly connected to PL Bank34

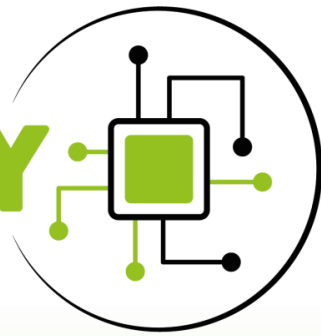
⁽⁷⁾ PMOD connected to Bank34

⁽⁸⁾ PMOD signals shared with on-kit 8GB eMMC memory

⁽⁹⁾ PMOD connected to Bank500 on Zynq MIO(0) and MIO(9-15)

SOM-MY

MY SMART DESIGN



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