2017 Marvell Product Selector Guide

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ARMADA Series

Embedded Processors

Part Numbers	CPU Base Architecture	Ethernet	PCIe	USB	UART	SATA	Device Bus	Frequency	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software
ARMADA 7K/8K																
ARMADA 7020	88F7020	ARM®v8 Cortex A72 Dual Core	2x 1/2.5GBE 1x 10GbE	1x PCIe3.0 x4/x2/x1 2x PCIe3.0 x1	2x USB3/ USB2	4x UART	2 x SATA 3	8/16 bit Device bus	800MHz, 1.0GHz, 1.2GHz, 1.6GHz	L1: 32KB/32KB L2: 1MB unified	32-bit ECC	17mm x 17mm	429L-FCBGA	0.65mm		DB-88F7040A-BP-DDR4	U-Boot, Linux, OpenWRT, Yocto
ARMADA 7040	88F7040	ARM®v8 Cortex A72 Quad Core	2x 1/2.5GBE 1x 10GbE	1x PCIe3.0 x4/x2/x1 2x PCIe3.0 x1	2x USB3/ USB2	4x UART	2 x SATA 3	8/16 bit Device bus	800MHz, 1.0GHz, 1.2GHz	L1: 32KB/32KB L2: 1MB unified	32-bit ECC	17mm x 17mm	429L-FCBGA	0.65mm		DB-88F7040A-BP-DDR4	U-Boot, Linux, OpenWRT, Yocto
ARMADA 8020	88F8020	ARM®v8 Cortex A72 Dual Core	4x 1/2.5GBE 2x 10GbE	1x PCIe3.0 x4/x2/x1 1x PCIe3.0 x1/x2 4x PCIe3 X1	3x USB3/ USB2	4x UART	4 x SATA 3	8/16 bit Device bus	1.0GHz, 1.2GHz, 1.6GHz, 2.0GHz	L1: 32KB/32KB L2: 1MB unified	32/64-bit ECC	24mm x 24mm	816 - FCBGA	0.8mm		DB-88F8040A-BP-DDR4	U-Boot, Linux, OpenWRT, Yocto
ARMADA 8040	88F8040	ARM®v8 Cortex A72 Quad Core	4x 1/2.5GBE 2x 10GbE	1x PCIe3.0 x4/x2/x1 1x PCIe3.0 x1/x2 4x PCIe3 X1	3x USB3/ USB2	4x UART	4 x SATA 3	8/16 bit Device bus	1.0GHz, 1.2GHz, 1.6GHz, 2.0GHz	L1: 32KB/32KB L2: 1MB unified	32/64-bit ECC	24mm x 24mm	816 - FCBGA	0.8mm		DB-88F8040A-BP-DDR4	U-Boot, Linux, OpenWRT, Yocto
ARMADA XP																
MV78230	MV78230	ARM®v7 Dual Core	3 x GbE	2 x PCIe 2.0 2 x PCIe 2.0 (1 x4 or 4 x1 and 1 x1)	3 x USB2	4 x UART	2 x SATA 2	8/16 bit Device bus	1.06GHz, 1.2GHz, 1.33GHz, 1.6GHz	L1: 32KB-I, 32KB-D; L2: 1MB unified	32bit ECC DDR3/L-1600 with ECC	23mm x 23mm	732-FCBGA	0.65mm		DB-MV784MP-GP	u-boot, Linux, vxWorks and others
MV78260	MV78260	ARM®v7 Dual Core	4 x GbE	3 x PCIe 2.0 (2 x4 or 4 x1, 1 x4 /x1)	3 x USB2	4 x UART	2 x SATA 2	8/16/32 bit Device bus	1.06GHz, 1.2GHz, 1.33GHz, 1.6GHz	L1: 32KB-I, 32KB-D; L2: 1MB unified	32/64bit ECC DDR3/L-1600 with ECC	23mm x 23mm	732-FCBGA	0.65mm		DB-MV784MP-GP	u-boot, Linux, vxWorks and others
MV78460	MV78460	ARM®v7 Quad Core	4 x GbE	4 x PCIe 2.0 (2 x4 or 4 x1 and 2x4/x1)	3 x USB2	4 x UART	2 x SATA 2	8/16/32 bit Device bus	1.2GHz, 1.33GHz, 1.6GHz	L1: 32KB-I, 32KB-D; L2: 2MB unified	32/64bit ECC DDR3/L-1600 with ECC	23mm x 23mm	732-FCBGA	0.65mm		DB-MV784MP-GP	u-boot, Linux, vxWorks and others
ARMADA 38x																

ARMADA Series

Embedded Processors

Part Numbers	CPU Base Architecture	Ethernet	PCIe	USB	UART	SATA	Device Bus	Frequency	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software
ARMADA 380	88F6810	ARM®v 7 Cortex A9 Single Core with NEON	2 x 1/2.5G bE	3 x PCIe 2.0 x1	2 x USB3/ USB2 and 1 x USB2	2x UART	2 x SATA 3	8/16 bit Device bus	1.0GHz, 1.33GHz, 1.6GHz	L1: 32KB/32K B L2: 512MB unified	16-bit, ECC DDR3/ L-1600 and DDR4-1800	17x17mm	372-TFBGA	0.8mm	Yes	DB-88F6820-GP-A0; DB-88F6820-AP-A0	U-Boot, Linux, OpenWR T, Yocto, FreeBSD
ARMADA 381	88F6811	ARM®v 7 Cortex A9 Single Core with NEON	1 x 1/2.5G bE	3 x PCIe 2.0 x1	1 x USB3/ USB2 and 1 x USB2	2x UART	2 x SATA 3	8/16 bit Device bus	1.0GHz, 1.33GHz	L1: 32KB/32K B L2: 1MB unified	16-bit, ECC DDR3/ L-1333	14x14mm	298-TFBGA	0.65mm	No	DB-88F6821-BP-A0	U-Boot, Linux, OpenWR T, Yocto, FreeBSD
ARMADA 382	88F6821	ARM®v7 Cortex A9 Dual Core with NEON	1 x 1/2.5G bE	3 x PCIe 2.0 x1	1 x USB3/ USB2 and 1 x USB2	2x UART	2 x SATA 3	8/16 bit Device bus	1.0GHz, 1.33GHz	L1: 32KB/32K B L2: 1MB unified	16-bit, ECC DDR3/ L-1333	14x14mm	298-TFBGA	0.65mm	No	DB-88F6821-BP-A0	U-Boot, Linux, OpenWR T, Yocto, FreeBSD
ARMADA 385	88F6820	ARM®v7 Cortex A9 Dual Core with NEON	3 x 1/2.5G bE	4 x PCIe 2.0 x1 or 1 x4	2 x USB3/ USB2 and 1 x USB2	2x UART	2 x SATA 3	8/16 bit Device bus	1.0GHz, 1.33GHz, 1.6GHz, 1.8GHz, 2.0GHz	L1: 32KB/32K B L2: 1MB unified	16/32-bit, ECC DDR3/ L-1600 and DDR4-1800	17x17mm	372-TFBGA	0.8mm	Yes	DB-88F6820-GP-A0; DB-88F6820-AP-A0	U-Boot, Linux, OpenWR T, Yocto, FreeBSD
ARMADA 388	88F6828	ARM®v7 Cortex A9 Dual Core with NEON	3 x 1/2.5G bE	4 x PCIe 2.0 x1 or 1 x4	2 x USB3/ USB2 and 1 x USB2	2x UART	4 x SATA 3	8/16 bit Device bus	1.0GHz, 1.33GHz, 1.6GHz, 1.8GHz, 2.0GHz	L1: 32KB/32K B L2: 1MB unified	16/32-bit, ECC DDR3/ L-1600 and DDR4-1800	17x17mm	372-TFBGA	0.8mm	Yes	DB-88F6820-GP-A0	U-Boot, Linux, OpenWR T, Yocto, FreeBSD
ARMADA 375																	
88F6720	88F6720	ARM®v7 Cortex A9 Dual Core with NEON	2 x GbE	2 x PCIe 2.0 x1	1 x USB3/ USB2 and 1 x USB2	2x UART	2 x SATA 2	8/16 bit Device bus	800MHz , 1.0GHz	L1: 32KB-I, 32KB-D; L2: 256KB unified	16/32-bit, DDR3/ L-1066	19mm x 19mm	511-TFBGA	0.65mm	Yes	DB-88F6720-A0	u-boot, Linux

ARMADA Series

Embedded Processors

Part Numbers	CPU Base Architecture	Ethernet	PCIe	USB	UART	SATA	Device Bus	Frequency	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software
ARMADA LP																
88F3710	88F3710	ARM®v8 Cortex A53 Single Core with NEON	2 x 1/2.5G bE	1 x PCIe 2.0 x1	1 x USB3/ USB2 and 1 x USB2	1x UART	1 x SATA 3	None	800MHz, 1.0GHz and 1.2GHz	L1: 32KB-I, 32KB-D; L2: 256KB unified	16 bit DDR3/3L/4	10.5mm x11.5mm	271L TFBGA	0.5mm	Yes	DB-88F3720-DDR3-1	u-boot, Linux
88F3720	88F3720	ARM®v8 Cortex A53 Dual Core with NEON	2 x 1/2.5G bE	1 x PCIe 2.0 x1	1 x USB3/ USB2 and 1 x USB2	1x UART	1 x SATA 3	None	800MHz, 1.0GHz and 1.2GHz	L1: 32KB-I, 32KB-D; L2: 256KB unified	16 bit DDR3/3L/4	10.5mm x11.5mm	271L TFBGA	0.5mm	Yes	DB-88F3720-DDR3-1	u-boot, Linux

LINK STREET® Series

Gateways	CPU	Memory	Port Configuration	Evaluation Board	Cache	GPIO	MAC Size	Power	Package Size	Package Type	QoS IEEE 802.1p Priority, 4 Queues per Port	IEEE 802.1Q Dynamic VLANs Supported	IEEE 802.1D Spanning Tree Support	I-Temp
Link Street 88E6218 6-Port FE Gateway Router	150MHz ARM®9 CPU	16/32-bit SDRAM	5 FE PHYs, 1 MII, 1 UART, 1 JTAG	RD-88E6218-SD-1	I&D 8K/8K 4-way	16	1K	2.25W	24mm x 24mm	216-QFP	Yes	No	Yes	
Link Street 88E6218R 5-Port FE Gateway Router	133MHz ARM®9 CPU	16-bit SDRAM	5 FE PHYs, 1 UART, 1 JTAG	DB1-88E6218R-1	I&D 8K/8K 4-way	9	1K	2.25W	14mm x 20mm	128-QFP	Yes	No	Yes	
Link Street 88E7251 6-Port FE AVB Gateway Router	400MHz ARM®9 CPU	8-bit DDR2/ DDR3	5 FE PHYs, 1 MII, 1 UART, 1 JTAG, USB, SDIO, I2S/ TDM Audio	RD1-88E7251-1	I&D 16K/16K 4-way	16	1K	1.0W	14mm x 20mm	128-QFP	Yes	64	Yes	
Link Street 88E7221	400MHz ARM®9 CPU	16-bit DDR2/ DDR3	2 FE PHYs, 1 MII, 1 UART, 1 JTAG, USB, SDIO, I2S/ TDM Audio	RD1-88E7221-1	I&D 16K/16K 4-way	16	1K	0.7W	14mm x 20mm	128-QFP	Yes	64	Yes	

EZ Connect

Microcontrollers

	Processor	Frequency	Connectivity	Memory	eXecute-In-Place	Security	DMA	Clock	Timers	Digital Interfaces	Analog	GPIOs	Debug	Package
88MW300 Microcontroller with Wi-Fi connectivity	ARM Cortex-M4F with MPU	200 MHz	802.11 b/g/n 1x1	ROM: 128KB, SRAM: 512KB, Always-On SRAM: 4KB	Yes	Secure Boot, AES engine, WLAN TKIP/AES	32x channels	On-chip RTC	2x GPT with LED PWM, Watch Dog	I2C (2x), UART (3x), SSP/SPI (3x), I2S (3x), QSPI (with 32KB Flash-cache)	ADC, DAC, Analog Comparator	Up to 35	JTAG/SWD	68-pin QFN 8x8 mm
88MW302 Microcontroller with Wi-Fi connectivity	ARM Cortex-M4F with MPU	200 MHz	802.11 b/g/n 1x1	ROM: 128KB, SRAM: 512KB, Always-On SRAM: 4KB	Yes	Secure Boot, AES engine, WLAN TKIP/AES	32x channels	RTC	4x GPT with LED PWM, Watch Dog	I2C (2x), UART (3x), SSP/SPI (3x), I2S (3x), QSPI (with 32KB Flash-cache), USB OTG	ADC, DAC, Analog Comparator	Up to 50	JTAG/SWD	88-pin QFN 10x10 mm
88MB300 Microcontroller with BT/BLE	ARM Cortex-M3 with MPU	128 MHz	Bluetooth 4.2, BDR/EDR BLE	ROM: 320KB, SRAM: 512KB	No	Bluetooth AES	6x channels	RTC	2x GPT, Watch Dog	I2C (2x), UART (2x), SSP/SPI (2x), I2S/PCM (2x), QSPI 16x16 Keyscan controller, Touch-button module, Trackball controller	ADC, DAC, Analog Comparator	Up to 32	JTAG/SWD	48-pin QFN, 69-bump eWLP

SATA Storage Controllers

Storage Switching

Part Numbers	Port Count	Bus Type	Queuing	Port Multiplier Support	Flash	Marvell Firmware	Power	Package Size	Package Type	I-Temp	Ball Pitch	Evaluation Board Part Number
88SE9345 PCIe 2.0X4 to 4 SATA 6Gb/s Ports Without RAID	88SE9345	4S	PCI-Express 2.0x4	Tag and Native Command	Yes	Flash BIOS I/F	N/A	~5W	19mm x 19mm	481-TFBGA	No	0.8mm	EV1-88SE9345
88SE9230 PCIe 2.0x2 to 4 SATA 6Gb/s Ports RAID Controller	88SE9230	4S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	HW RAID 0/1	1w	9mm x 9mm	76-QFN	No	0.4mm	EV1-88SE9230
88SE9235 PCIe 2.0x2 to 4 SATA 6Gb/s Ports Without RAID	88SE9235	4S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	1w	9mm x 9mm	76-QFN	No	0.4mm	EV1-88SE9235
88SE9215 PCIe 2.0x1 to 4 SATA 6Gb/s Ports Without RAID	88SE9215	4S	PCI-Express 2.0x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	1w	9mm x 9mm	76-QFN	No	0.4mm	EV1-88SE9215
88SE9170 PCIe 2.0x1 to 2 SATA 6Gb/s Ports Without RAID	88SE9170	2S	PCI Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mm x 7mm	56-QFN	Yes	0.4mm	EV1-88SE9170
88SE9182 PCIe 2.0x2 to 2 SATA 6Gb/s Ports Without RAID	88SE9182	2S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mm x 7mm	56-QFN	Yes	0.4mm	EV1-88SE9182
88SE9130 PCIe 2.0x1 to 2 SATA 6Gb/s Ports RAID controller	88SE9130	2S	PCI-Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	HW RAID 0/1	1W	9mm x 9mm	76-QFN	No	0.4mm	EV1-88SE9130
88SE9128 PCIe 2.0x1 to 2 SATA 6Gb/s Ports (1 PATA Port) RAID controller	88SE9128	2S 1P	PCI-Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	HW RAID 0/1	1W	9mm x 9mm	76-QFN	No	0.4mm	EV1-88SE9128
88SE9120 PCIe 2.0x1 to 2 SATA 6Gb/s Ports (1 PATA Port) Without RAID	88SE9120	2S 1P	PCI-Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	1W	9mm x 9mm	76-QFN	Yes	0.4mm	EV1-88SE9120
88SE9125 PCIe 2.0x1 to 2 SATA 6Gb/s Ports Without RAID	88SE9125	2S	PCI-Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	1W	9mm x 9mm	76-QFN	Yes	0.4mm	EV1-88SE9125

SATA Storage Controllers

Storage Switching	Part Numbers	Port Count	Bus Type	Queuing	Port Multiplier Support	Flash	Marvell Firmware	Power	Package Size	Package Type	I-Temp	Ball Pitch	Evaluation Board Part Number
88SE1475 PCIe 3.0x8 to 16 SATA 6Gb/s Ports Without RAID	88SE1475	16S	PCI-Express 3.0 x8	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	9W	21mm x 21mm	625 HFCBGA	No	0.8mm	EV1-88SE1475
88SE9171 PCIe 2.0x1 to 1 SATA 6Gb/s Port	88SE9171	1S	PCI-Express 2.0x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mm x 7mm	56-QFN	Yes	0.4mm	EV1-88SE9171

SAS/SATA Storage Controllers

Storage Switching	Part Numbers	Port Count	Bus Type	Queuing	SAS Expander Support	Flash	Target Mode	Marvell RAID Software	Power	Package Size	Package Type	I-Temp	Ball Pitch	Evaluation Board Part Number
88RC9580 PCIe 2.0x8 to 8 SAS/SATA 6Gb/s Ports RAID Controller	88RC9580	8	PCI-Express 2.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	~8W	27mm x 27mm	676-FCBGA		1.0mm	DB1-88RC9580
88SE9485 PCIe 2.0 x8 to 8 SAS/SATA 6Gb/s Ports I/O Controller	88SE9485	8	PCI-Express 2.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	No	N/A	~6W	23mm x 23mm	484-HSBGA		1.0mm	HA2VA6800m-RC1Vxx
88SE9445 PCIe 2.0 x4 to 4 SAS/SATA 6Gb/s Ports I/O Controller	88SE9445	4	PCI-Express 2.0 x4	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	~5W	19mm x 19mm	481-TFBGA		0.8mm	EV1-88SE9445
88SE1495 PCIe 3.0x8 to 16 Ports 12Gb/s SAS or 6Gb/s SATA Without RAID	88SE1495	16	PCI-Express 3.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	9.5W	21mm x 21mm	625 HFCBGA		0.8mm	EV1-88SE1485
88SE1485 PCIe 3.0x8 to 8 Ports 12Gb/s SAS or 6Gb/s SATA Without RAID	88SE1485	8	PCI-Express 3.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	7.5W	21mm x 21mm	625 HFCBGA		0.8mm	EV1-88SE1485

SATA Port Multiplier/Multiplexer

Storage Switching	Part Numbers	Port Count	Data Rate	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
88SM9715 1 Port to 5 Port 6Gb/s SATA Port Multiplier With Enclosure Management	88SM9715	6	SATA 6Gb/s	0.88W	10mm x 10mm	84-QFN	Yes	EV1-88SM9715
88SM9705 1 Port to 5 Port 6Gb/s SATA Port Multiplier	88SM9705	6	SATA 6Gb/s	0.88W	10mm x 10mm	84-QFN	Yes	EV1-88SM9705
88SM9602 1 Port to 2 Port 6Gb/s SATA Port	88SM9602	3	SATA 6Gb/s	0.50W	6mm x 6mm	48-MQFN		EV1-88SM9602
88SM4140 1:4 Serial ATA 3Gb/s Port Multiplier	88SM4140	5	SATA 3Gb/s	1.6W	12mm x 12mm	80-LQFP		DB1-88SM4140C1-8087

SATA Bridge

Storage Switching	Part Numbers	Port Count	Data Rate	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
88SA8052 SATA/PATA Bridge	88SA8052	Host or Device	SATA 3Gb/s to PATA 133	0.25W	9mm x 9mm	64-QFN or TQFP	Yes (QFN)	DB-88SA8052-D, DB-88SA8052-H

SAS to SATA Protocol Converter

Storage Switching

Part Number	SAS Port	SATA port	Data Rate	Internal Flash	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
88SF9210 6Gb/s SAS to SATA Protocol Converter	88SF9210	2	2	SAS/SATA 6.0 Gb/s	N/A	1.35W	10mm x 10mm	84-QFN		DB1-88SF9210
88SF9110 6Gb/s SAS to SATA Protocol Converter	88SF9110	2	1	SAS/SATA 6.0 Gb/s	N/A	1.20W	10mm x 10mm	84-QFN		DB1-88SF9110

Link Street® - Fast Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6020 4-Port FE Switch	2 PHYs 2 MII/RMII	4	0	0	0	0	1	2	2	2	0	1
88E6070 5-Port FE Switch	5 PHYs	5	0	0	0	0	0	0	0	5	0	1
88E6071 5-Port FE Switch	5 PHYs 2 RMII (or 1 MII/RGMII)	7	0	0	0	0	2	1	2	5	0	1
88E6085 10-Port FE Switch	8 PHYs 2 MII	10	0	0	0	0	0	2	0	8	0	0
88E6065/B 6-Port FE Switch	5 PHYs 1 MII or 4 PHYs 2 MII	6	0	0	0	0	0	2	2	5	0	2

Link Street® - Fast Gigabit Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6046 6-Port FE+GE Switch	4 FE PHYs GMII/RGMII/SGMII	6	0	0	2	1	0	2	0	4	0	0

Link Street® - Fast Gigabit Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6240 7-Port FE+GE Switch	4 FE PHYs 1 GE PHY 1 Serdes 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	7	0	0	1	1	2	2	2	5	1	1
88E6097 11-Port FE+GE Switch	8 FE PHYs GMII/RGMII/SGMII	11	0	0	3	1	1	2	0	8	0	0
88E6097F 11-Port FE+GE Switch	8 FE PHYs GMII/RGMII/SGMII	11	0	0	3	2	1	2	0	8	0	8
88E6290 11-Port AVB FE+GE Switch	8 FE PHYs 1 RGMII/MII/RMII 2 2.5G Serdes/SGMII	11	2	0	2	0	1	1	1	8	0	0

Link Street® - Gigabit Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6341 6-Port AVB GE Switch	4 GE PHYs 1 RGMII/MII/RMII 1 2.5G/1G SERDES	6	1	0	1	0	1	1	1	4	4	0
88E6155 6-Port GE Switch	6 SerDes or 5 SerDes 1 GMII	6	0	0	6	1	0	1	0	0	0	0

Link Street® - Gigabit Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6352 7-Port AVB GE Switch	5 GE PHYs 1 Serdes 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	7	0	0	1	1	2	2	2	5	5	1
88E6321 7-Port AVB GE Switch	2 GE PHYs 3 RGMII/MII/RGMII 2 Serdes/SGMII	7	0	0	2	1	3	3	3	2	2	2
88E6185 10-Port GE Switch	10 SerDes or 9 SerDes 1 GMII	10	0	0	10	1	0	1	0	0	0	0
88E6390 11-Port AVB GE Switch, 8 GE PHYs + 1 RGMII/MII/RMII + 2 2.5G Serdes/SGMII	8 GE PHYs 1 RGMII/MII/RMII 2 2.5G Serdes/SGMII	11	2	0	2	0	1	1	1	8	8	0
88E6122 6-Port GE Switch	2 GE PHYs 3 SerDes 1 GMII	6	0	0	3	1	0	1	0	2	2	3
88E6131 8-Port GE Switch	3 GE PHYs 4 SerDes 1 GMII	8	0	0	4	1	0	1	0	3	3	4

Link Street® - Gigabit 10G Ethernet Switches

SOHO Switching	Port Configuration	Number of Ports	2.5G	Number of (R)XAUI	SGMII / 1000Base X	GMII	RGMII	MII	RMII	100Base T	1000Base T	100Base FX
88E6390X 11-Port AVB GE+10G Switch	8 GE PHYs 1 RGMII/MII/RMII 2 XAUI/RXAUI	11	2	2	8	0	1	1	1	8	8	0

PRESTERA® DX

Switching

DX Series

	Part Numbers	Port Configuration	Type	Evaluation Boards	Number of Ports	Package Size	Package Type	I-Temp
Prestera-DX107 10-Port Gigabit Ethernet Packet Processor	98DX107-xx-LKJ	10 SGMII	Layer 2/3	DB-DX107-10G, RD-DX107-48F4G	10	14mm x 20mm	128-LQFP	Yes
Prestera-DX160 16-Port Gigabit Ethernet Packet Processor	98DX160-xx	16 SGMII	Layer 2	RD-DX240-24G	16	31mm x 31mm	458-HSBGA	
Prestera-DX167 16-Port Gigabit Ethernet Packet Processor	98DX167-xx	16 SGMII	Layer 2/3	RD-DX247-24G	16	31mm x 31mm	458-HSBGA	Yes
Prestera-DX240 24-Port Gigabit Ethernet Packet Processor	98DX240-xx	24 SGMII	Layer 2	RD-DX240-24G	24	31mm x 31mm	458-HSBGA	
Prestera-DX249 24-Port Gigabit Ethernet with 2 HX Ports Packet Processor	98DX249-xx	24 SGMII, 2 HX	Layer 2	DB-DX249-24G-2HX	26	31mm x 31mm	480-HSBGA	
Prestera-DX253 24-Port Gigabit Ethernet Packet Processor	98DX253-xx	24 SGMII	Layer 2/3	DB-DX273-24G3XG, RD-DX273-48G2XG	24	37.5mm x 37.5mm	788-HSBGA	Yes
Prestera-DX269 24-Port Gigabit Ethernet with 2 HX/HGS Ports Packet Processor	98DX269-xx	24 SGMII, 3 HX/ XAUI	Layer 2	DB-DX269-24G-2HX-IB	27	37.5mm x 37.5mm	788-HSBGA	
Prestera-DX273 24-Port Gigabit Ethernet with 3 HGS Ports Packet Processor	98DX273-xx	24 SGMII, 3 XAUI	Layer 2/3	DB-DX273-24G3XG, RD-DX273-48G2XG	27	37.5mm x 37.5mm	788-HSBGA	
Prestera-DX5128 24-Port Gigabit Ethernet with 4 10GE Ports Packet Processor	98DX5128-xx	24 SGMII, 4 XAUI	Layer 3	DB-DX3-6XG-4HGS, RD-DX3-48GE-4HGS	28	35mm x 35mm	1138-FCBGA	-

PRESTERA® DX

Switching	Part Numbers	Port Configuration	Type	Evaluation Boards	Number of Ports	Package Size	Package Type	I-Temp
Prestera-DX8110 10-Port 10Gigabit Ethernet Packet Processor	98DX8110-xx	10 XAUI	Layer 3	DB-DX3-6XG-4HGS, RD-DX3-48GE-4HGS	10	35mm x 35mm	1138-FCBGA	
Prestera-DXx24 24-Port Gigabit Ethernet Packet Processor	98DX324-A0-LKJ2C000, 98DX224-A0-LKJ2C000	6 QSGMII	Layer 2	RD-DX-24G-A RD-DX-22GE2C-A	24	14mm x 20mm	LQFP	No
Prestera-DXx16 16-Port Gigabit Ethernet Packet Processor	98DX316-A0-LKJ2C000, 98DX216-A0-LKJ2C000	4 QSGMII	Layer 2	RD-DX-16UNM	16	14mm x 20mm	LQFP	No
Prestera-DXx08 8-Port Gigabit Ethernet Packet Processor	98DX308-A0-LKJ2C000, 98DX208-A0-LKJ2C000	2 QSGMII	Layer 2	RD-DX-8G-A	8	14mm x 20mm	LQFP	No

PRESTERA® CX

Switching	Part Numbers	Port Configuration	Type	Evaluation Boards	Number of Ports	Package Size	Package Type	I-Temp
CX Series Packet Processors								
Prestera-CX8248	98CX8248	48 RXAUI	L3	RD-CX-48XG	48	40mm x 40mm	HFCBGA	
Prestera-CX8234	98CX8234	32 RXAUI 4 * 40GbE	L3	DB-CX-48XG	32	40mm x 40mm	HFCBGA	

Intelligent Ethernet MAC

Switching	Part Numbers	Port Configuration	Number of Ports	MAC Speed	Uplink Port	Jumbo Frames	Package Size	# Pins	Package Type	I-Temp	Ball Pitch	Evaluation Boards
Gigabit Ethernet MAC Controllers												
Prestera-MV82104-Cx 4x1 GE Gigabit Ethernet MAC Controller	MV82104-Cx	SGMII	4	10/100/1000 Mbps	SPI 4.2	Yes	35mm x 35mm	672	HSBGA		1.0mm	
Prestera-MV82110-Cx 10x1 GE Gigabit Ethernet MAC Controller (SGMII <-> SPI-4.2)	MV82110-Cx	SGMII	10	10/100/1000 Mbps	SPI 4.2	Yes	35mm x 35mm	672	HSBGA		1.0mm	
Prestera-MV82210-Cx 1x10 GE Gigabit Ethernet MAC Controller (XAUI <-> SPI-4.2)	MV82210-Cx	XAUI	1	10 Gbps	SPI 4.2	Yes	35mm x 35mm	672	HSBGA		1.0mm	
Secure MAC/PHY												
Prestera X2220 Integrated 10GbE XAUI/XFI Secure MAC/PHY with LinkCrypt technology	98X2220	XAUI/XFI	4	10 Gbps	XAUI	Yes	21mm x 21mm	400	FCBGA		1.0mm	

Fast Ethernet (FE) PHY

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	10/100BASE-T	100BASE-FX	Mac Interfaces	Core Voltage	Digital I/O	Analog Voltage	Internal Regulator	Virtual Cable Tester	Programmable LED	RoHS 6/6, Green*	JTAG	Package Type
Single-Port Devices																	
88E3015 10/100BASE-T Fast Ethernet PHY	1	Yes	No	No	No	Yes	Yes	MII, RGMII	1.2V	2.5V/3.3V	2.5V	Yes	Yes	Yes	R	No	56-QFN
88E3016 10/100BASE-T Fast Ethernet PHY	1	Yes	No	No	No	Yes	Yes	RGMII	1.2V	2.5V/3.3V	2.5V	Yes	Yes	Yes	R	Yes	64-QFN
88E3018 10/100BASE-T Fast Ethernet PHY	1	Yes	No	Yes	No	Yes	Yes	MII, RGMII	1.2V	2.5V/3.3V	2.5V	Yes	Yes	Yes	R	Yes	64-QFN
88E3019 10/100BASE-T Fast Ethernet PHY	1	No	No	No	No	Yes	No	MII, RMII, RGMII	1.2V	2.5V/3.3V	2.5V	No	Yes	Yes	G	No	32-QFN
Octal-Port Devices																	
88E3082 10/100BASE-T Octal PHY	8	Yes	No	Yes	No	Yes	Yes	RMII, SMII, SSSMII, DDR-SSSMII	1.5V	2.5V/3.3V	2.5V	Yes	Yes	Yes	R	Yes	224-TFBGA
88E3083 10/100BASE-T Octal PHY	8	Yes	No	No	No	Yes	Yes	SMII, SSSMII, DDR-SSSMII	1.5V	2.5V/3.3V	2.5V	Yes	Yes	Yes	R	Yes	128-LQFP

1-Gigabit Ethernet (ALASKA®)

Transceivers

	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	BASE-T Speeds (Cu)	Optical Line Interfaces (SGMII)	Mac Interfaces	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Internal Regulator	Integrated Passives	Reference Clock	JTAG	Package Type
Single Port Devices																			
Alaska 88E1518 EEE 10/100/1000BASE-T PHY with RGMII	1	No	No	No	No	Yes	Yes	10M/100M/1G	No	RGMII	Yes	1.0V	1.8V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	48-QFN
Alaska 88E1514P EEE 10/100/1000BASE-T PHY with SGMII, Copper/ Fiber Automedia Detect and Low-Latency (1Step-PTP) 1588 v2 support	1	No	No	No	Yes	Yes	Yes	10M/100M/1G	No	SGMII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	56-QFN
Alaska 88E1514 EEE 10/100/1000BASE-T PHY with SGMII, Copper/ Fiber Automedia Detect	1	No	No	No	No	Yes	Yes	10M/100M/1G	No	SGMII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	56-QFN
Alaska 88E1512P EEE 10/100/1000BASE-T PHY with RGMII, SGMII, Copper/Fiber Automedia Detect and Low-Latency (1Step-PTP) 1588 v2 support	1	Yes	No	Yes	Yes	Yes	Yes	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	RGMII, SGMII, MII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	56-QFN
Alaska 88E1512 EEE 10/100/1000BASE-T PHY with RGMII, SGMII Copper/Fiber Automedia Detect	1	Yes	No	Yes	No	Yes	Yes	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	RGMII, SGMII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	56-QFN
Alaska 88E1510Q EEE 10/100/1000BASE-T PHY with RGMII and Low-Latency (1Step-PTP) 1588 v2 support	1	No	No	Yes	Yes	Yes	Yes	10M/100M/1G	No	RGMII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	48-QFN
Alaska 88E1510P EEE 10/100/1000BASE-T PHY with RGMII and Low-Latency (1Step-PTP) 1588 v2 support	1	No	No	Yes	Yes	Yes	Yes	10M/100M/1G	No	RGMII, MII	Yes	1.0V	1.8V/2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	48-QFN
Alaska 88E1510 EEE 10/100/1000BASE-T PHY with RGMII	1	No	No	Yes	No	Yes	Yes	10M/100M/1G	No	RGMII	Yes	1.0V	2.5V/3.3V	1.8V/3.3V	Switch-cap Regulator	Yes	25 MHz	No	48-QFN

1-Gigabit Ethernet (ALASKA®)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	BASE-T Speeds (Cu)	Optical Line Interfaces (SGMII)	Mac Interfaces	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Internal Regulator	Integrated Passives	Reference Clock	JTAG	Package Type
Alaska 88E1112 10/100/1000BASE-T PHY with Dual SERDES/SGMII	1	Yes	No	Yes	No	No	No	10M/100M/1G	100BASE-FX, 1000BASE-X, SFP	SGMII	No	1.2V	2.5V	2.5V	No	No	25 MHz	No	64-QFN
Alaska 88E1111 10/100/1000BASE-T PHY with multiple MAC Interfaces	1	Yes	No	Yes	No	No	No	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	RGMII, SGMII, GMII, MII,TBI, RTBI	No	1.0V/1.2V	2.5V	2.5V	No	No	25, 125 MHz	Yes	Multiple Packages
Quad-Port Devices																			
Alaska 88E1548P EEE 100/100/1000BASE-T PHY with QSGMII	4	Yes	Yes	Yes	Yes	Yes	Yes	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	SGMII, QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	15mm x 15mm 196-pin TFBGA
Alaska 88E1548M EEE 100/100/1000BASE-T PHY with SGMII plus MACSec, Automedia Detect	4	Yes	Yes	No	No	Yes	Yes	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	SGMII, QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	196-TFBGA
Alaska 88E1548 EEE 100/100/1000BASE-T PHY with QSGMII	4	Yes	No	No	No	No	No	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	SGMII, QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	15mm x 15mm 196-pin TFBGA
Alaska 88E1545M EEE 100/100/1000BASE-T PHY with QSGMII plus MACSec	4	No	Yes	No	No	No	No	10M/100M/1G	No	QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	128-LQFP
Alaska 88E1545 EEE 100/100/1000BASE-T PHY with QSGMII	4	No	No	No	No	No	No	10M/100M/1G	No	QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	128-LQFP
Alaska 88E1543M EEE 100/100/1000BASE-T PHY with SGMII plus MACSec	4	Yes	Yes	No	No	No	No	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	SGMII	Yes	1.0V	2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	128-LQFP
Alaska 88E1543 EEE 100/100/1000BASE-T PHY with SGMII	4	Yes	No	No	No	No	No	10M/100M/1G	SGMII, 100BASE-FX, 1000BASE-X, SFP	SGMII	Yes	1.0V	2.5V/3.3V	1.8V/3.3V	No	Yes	25, 125, 156.25 MHz	Yes	128-LQFP

1-Gigabit Ethernet (ALASKA®)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	BASE-T Speeds (Cu)	Optical Line Interfaces (SGMII)	Mac Interfaces	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Internal Regulator	Integrated Passives	Reference Clock	JTAG	Package Type
Alaska 88E1540M EEE 100/100/1000BASE-T PHY with QSGMII plus MACSec	4	No	Yes	No	No	Yes	Yes	10M/100M/1G	No	QSGMII	Yes	1.0V	1.2V/1.8V/ 2.5V/3.3V	1.8V/3.3V	No	Yes		Yes	196-TFBGA
Octal-Port-Devices																			
Alaska 88E1685 EEE 10/100/1000BASE-T PHY with QSGMII	8	No	No	No	No	No	No	10M/100M/1G	No	QSGMII	Yes	0.9V	1.2V/1.8V/ 2.5V/3.3V	1.5V/1.8V	No	Yes	125 MHz	Yes	128-LQFP
Alaska 88E1680M EEE 10/100/1000BASE-T PHY with QSGMII plus MACSec, PTP, SyncE	8	No	Yes	No	Yes	Yes	Yes	10M/100M/1G	No	QSGMII	Yes	0.9V	1.2V/1.8V/ 2.5V/3.3V	1.5V/1.8V	No	Yes	125, 156.25 MHz	Yes	128-LQFP
Alaska 88E1680 EEE 10/100/1000BASE-T PHY with QSGMII, MACSec, PTP, SyncE	8	No	No	No	No	Yes	Yes	10M/100M/1G	No	QSGMII	Yes	0.9V	1.2V/1.8V/ 2.5V/3.3V	1.5V/1.8V	No	Yes	125, 156.25 MHz	Yes	128-LQFP

10-Gigabit Ethernet (ALASKA® X)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	Supported Speeds	Host Interfaces	Optical Interface	Optical Module Types	Direct Attach Copper	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Reference Clock	JTAG	Package Type
Copper (Base-T) PHYs																			
Alaska X 88X3340P Quad EEE 10/100/1G/2.5G/5G/10GBASE-T PHY with XFI, MACSec, PTP	4	Yes	Yes	No	Yes	Yes	Yes	10G, 5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	484-HFCBGA

10-Gigabit Ethernet (ALASKA® X)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	Supported Speeds	Host Interfaces	Optical Interface	Optical Module Types	Direct Attach Copper	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Reference Clock	JTAG	Package Type
Alaska X 88X3340 Quad EEE 10/100/1G/2.5G/5G/10GBASE-T PHY with XFI	4	Yes	No	No	No	No	Yes	10G, 5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	484-HFCBGA
Alaska X 88X3310P Single EEE 10/100/1G/2.5G/5G/10GBASE-T PHY with XFI, MACSec, PTP	1	Yes	Yes	No	Yes	Yes	Yes	10G, 5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, XAUI, 5GBASE-R, 2500BASE-X, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	168-HFCBGA
Alaska X 88X3310 Single EEE 10/100/1G/2.5G/5G/10GBASE-T PHY with XFI	1	Yes	No	No	No	No	Yes	10G, 5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, XAUI, 5GBASE-R, 2500BASE-X, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	168-HFCBGA
Alaska X 88X3240P Quad EEE 10/100/1G/10GBASE-T PHY with XFI, MACSec, PTP	4	Yes	Yes	No	Yes	Yes	Yes	10G, 1G, 100M, 10M	XFI, RXAUI, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 2.0V, 2.5V	50, 156.25 MHz	Yes	484-HFCBGA
Alaska X 88X3240 Dual EEE 10/100/1G/10GBASE-T PHY with XFI	4	Yes	No	No	No	No	Yes	10G, 1G, 100M, 10M	XFI, RXAUI, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 2.0V, 2.5V	50, 156.25 MHz	Yes	484-HFCBGA
Alaska X 88X3220P Dual EEE 10/100/1G/10GBASE-T PHY with XFI, MACSec, PTP	2	Yes	Yes	No	Yes	Yes	Yes	10G, 1G, 100M, 10M	XFI, RXAUI, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 2.0V, 2.5V	50, 156.25 MHz	Yes	256-HFCBGA
Alaska X 88X3220 Dual EEE 10/100/1G/10GBASE-T PHY with XFI	2	Yes	No	No	No	No	Yes	10G, 1G, 100M, 10M	XFI, RXAUI, SGMII	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 2.0V, 2.5V	50, 156.25 MHz	Yes	256-HFCBGA
Fiber/Backplane PHYs																			
Alaska X 88X2340P Quad-10G PHY with MacSec and PTP	4	Yes	Yes	No	Yes	Yes	No	10G, 1G	XFI	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	No	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	484-HFCBGA

10-Gigabit Ethernet (ALASKA® X)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	Supported Speeds	Host Interfaces	Optical Interface	Optical Module Types	Direct Attach Copper	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Reference Clock	JTAG	Package Type
Alaska X 88X2320P Dual-10G PHY with MacSec and PTP	2	Yes	Yes	No	Yes	Yes	No	10G, 1G	XFI	XFI/SFI	10GBASE-SR/ER/LR, 1000BASE-SX/LX	Yes	No	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	256-HFCBGA
Alaska X 88X2242 40G/Quad-10G EDC PHY	4	Yes	No	No	Yes	Yes	Yes	40G, 10G, 1G	XLAUI, XFI, XAUI, RXAUI	SFI, XLPPI	40GBASE-SR4/ LR4, 10GBASE-SR/ ER/LR, 10GBASE-SW/EW/LW, 10GBASE-LRM, 1000BASE-SX/LX	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA
Alaska X 88X2222 Dual-10G EDC PHY with MacSec	2	Yes	No	No	No	No	Yes	10G, 1G	XAUI, RXAUI, XFI	SFI	10GBASE-SR/ER/ LR, 10GBASE-SW/ EW/LW, 10GBASE-LRM, 1000BASE-X	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA
Alaska X 88X2242M 40G/Quad-10G EDC PHY with MacSec	4	Yes	Yes	No	No	No	Yes	40G, 10G, 1G	XLAUI, XFI, XAUI, RXAUI	SFI, XLPPI	40GBASE-SR4/ LR4, 10GBASE-SR/ ER/LR, 10GBASE-SW/EW/LW, 10GBASE-LRM, 1000BASE-SX/LX	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA
Alaska X 88X2222M Dual-10G EDC PHY with MacSec	2	Yes	Yes	No	No	No	Yes	10G, 1G	XAUI, RXAUI, XFI	SFI	10GBASE-SR/ER/ LR, 10GBASE-SW/ EW/LW, 10GBASE-LRM, 1000BASE-X	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA
Alaska X 88X2242P 40G/Quad-10G EDC PHY with MacSec and PTP	4	Yes	Yes	No	Yes	Yes	Yes	10G, 1G	XAUI, RXAUI, XFI, KR	SFI	10GBASE-SR/ER/ LR, 10GBASE-SW/ EW/LW, 10GBASE-LRM, 1000BASE-X	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA
Alaska X 88X2222P Dual-10G EDC PHY with MacSec, and PTP	2	Yes	Yes	No	Yes	Yes	Yes	10G, 1G	XAUI, RXAUI, XFI, KR	SFI	10GBASE-SR/ER/ LR, 10GBASE-SW/ EW/LW, 10GBASE-LRM, 1000BASE-X	Yes	No	1.0V	1.5V/1.8V/ 2.5V/3.3V	1.1V/1.5V	156.25, 155.52 MHz	Yes	324-FCBGA

Copper (NBASE-T) Multispeed Ethernet (ALASKA® M)

Transceivers	Number of Ports	Optical (Line)	MACSec (LinkCrypt®)	I-Temp	1-Step PTP (1588 v2)	2-Step PTP	SyncE	BASE-T Speeds (Copper)	Host Interfaces	Optical Interface	Optical Module Types	Direct Attach Copper	Energy Efficient Ethernet	Core Voltage	Digital I/O	Analog Voltage	Reference Clock	JTAG	Package Type
88E2180 Octal EEE 10/100/1G/2.5G/5GBASE-T PHY	8	No	No	Yes	No	No	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII-M, XFI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V, 3.3V	50, 156.25 MHz	Yes	529-HFCBGA
88E2110 Single EEE 10/100/1G/2.5G/5GBASE-T PHY	1	No	No	Yes	No	No	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII-M, XFI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V, 3.3V	50, 156.25 MHz	Yes	104-HFCBGA
88E2040P Quad EEE 10/100/1G/2.5G/5GBASE-T PHY with MACSec, PTP	4	No	Yes	No	Yes	Yes	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	484-HFCBGA
88E2040 Quad EEE 10/100/1G/2.5G/5GBASE-T PHY	4	No	No	No	No	No	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	484-HFCBGA
88E2010P Single EEE 10/100/1G/2.5G/5GBASE-T PHY with MACSec, PTP	1	No	Yes	No	Yes	Yes	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	168-HFCBGA
88E2010 Single EEE 10/100/1G/2.5G/5GBASE-T PHY	1	No	No	No	No	No	Yes	5G, 2.5G, 1G, 100M, 10M	USXGMII, XFI, RXAUI, 5GBASE-R, 2500BASE-X, SGMII	No	No	No	Yes	0.80V	1.2V/1.5V/ 1.8V/2.5V /3.3V	1.5V, 1.8V/2.0V, 2.3V/2.5V	50, 156.25 MHz	Yes	168-HFCBGA

AVASTAR™

Wireless

	Part Number	Wireless Technologies Support	Interface Support	Package Type	Package Size	Ball Pitch	Embedded CPU	Temp	Evaluation Boards	Process
AVASTAR 8900 Family										
88W8997	88W8997	802.11 a/b/g/n/ac 2x2 + BT 4.0, Dual-mode	PCIE, SDIO 3.0, USB 3.0/2.0, UART	QFN, CSP	9mm x 9mm & Chip Scale	400um, 350um	Yes	-30 to +85C	RD-88W-8997-PCIe/SD/USB	28nm
88W8977	88W8977	802.11 a/b/g/n/ac 1x1 + BT 4.0, Dual-mode	SDIO 3.0, UART	QFN, eWLP	8mm x 8mm & Wafer-Level	400um	Yes	-30 to +85C	RD-88W-8977e/Q	28nm
88W8964	88W8964	802.11 a/b/g/n/ac 4x4	PCIE, UART	aQFN	11.8mm x 11mm	650um	Yes	0 to +70C	RD-88W-AP8964-DR2	28nm
AVASTAR 8800 Family										
88W8897	88W8897	802.11 a/b/g/n/ac 2x2 + BT 4.0, Dual-mode	PCIE, SDIO 3.0, USB 2.0, UART	QFN, CSP	9.5mm x 11mm & Chip Scale	400um	Yes	-30 to +85C	RD-88W-8897PCIe/SD	40nm
88W8887	88W8887	802.11a/b/g/n/ac 1x1 + BT 4.0 Dual-mode	SDIO 3.0, UART	QFN, CSP	9mm x 9mm & Chip Scale	400um	Yes	-30 to +85C	RD-88W-8887-AGC/Q	40nm
88W8864	88W8864	802.11 a/b/g/n/ac 4x4	PCIE, UART	aQFN	11.8mm x 11mm	800um	Yes	0 to +70C	RD-88W-AP-8864DR2	40nm
88W8801	88W8801	802.11a/b/g/n 1x1 Dual-mode	SDIO 3.0, USB 2.0	QFN	6mm x 6mm	400um	Yes	-30 to +85C	RD-88W-SD/USB 8801	40nm

Marvell

Marvell first revolutionized the digital storage industry by moving information at speeds never thought possible. Today, that same breakthrough innovation remains at the heart of the company's storage, network infrastructure, and wireless connectivity solutions. With leading intellectual property and deep system-level knowledge, Marvell's semiconductor solutions continue to transform the enterprise, cloud, automotive, industrial, and consumer markets.

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