2014 Marvell Product Selector Guide

TOTAL SOLUTIONS FROM MARVELL

Providing a broad spectrum of solutions across a wide range of market segments.

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Fast Ethernet (FE) PHY

Transceivers	Number of Ports	10/100BASE-T	100BASE-FX	MII	RMII	SMII	SSSMII	RGMII	DDR-SSSMII	Internal Regulator	Virtual Cable Tester	Programmable LED	JTAG	I-Temp	RoHS 6/6, Green*	Production	Package Type
Single-Port Devices																	
88E3015 10/100BASE-T Fast Ethernet PHY	1	Yes	Yes	Yes				Yes		Yes	Yes	Yes			R	Yes	56-QFN
88E3016 10/100BASE-T Fast Ethernet PHY	1	Yes	Yes					Yes		Yes	Yes	Yes	Yes		R	Yes	64-QFN
88E3018 10/100BASE-T Fast Ethernet PHY	1	Yes	Yes	Yes				Yes		Yes	Yes	Yes	Yes	Yes	R	Yes	64-QFN
88E3019 10/100BASE-T Fast Ethernet PHY	1	Yes		Yes	Yes			Yes			Yes	Yes			G	Yes	32-QFN
Octal-Port Devices																	
88E3082 10/100BASE-T Octal PHY	8	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	R	Yes	224-TFBGA
88E3083 10/100BASE-T Octal PHY	8	Yes	Yes			Yes	Yes		Yes	Yes	Yes	Yes	Yes		R	Yes	128-LQFP

ALASKA® Series

Transceivers

Single-Port Devices

	Number of Ports	10/100/1000BASE-T	100BASE-FX	1000BASE-X	SGMII (Line)	SFP	MII	GMII	RGMII	SGMII (MAC)	TBI	RTBI	SerDes	QSGMII	Internal Regulator	Integrated Passives	Virtual Cable Tester	Programmable LED	JTAG	125MHz CLK OUT	I-Temp	Energy Efficient Ethernet (EEE)	RoHS 6/6, Green*	Production	Package Type
Alaska 88E1111 10/100/1000BASE-T PHY with multiple MAC Interfaces	1	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes	Yes	Yes		R	Yes	Multiple Packages
Alaska 88E1112 10/100/1000BASE-T PHY with Dual SERDES/SGMII	1	Yes	Yes	Yes	Yes	Yes				Yes			Yes				Yes	Yes			Yes		R	Yes	64-QFN
Alaska 88E1113 Fiber Transceiver	1		Yes	Yes		Yes				Yes			Yes				Yes	Yes					R	Yes	64-QFN
Alaska 88E1114 10/100/1000BASE-T PHY with SERDES/SGMII	1	Yes	Yes	Yes	Yes					Yes			Yes				Yes	Yes					R	Yes	64-QFN
Alaska 88E1116R 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						with PNP	Yes	Yes	Yes	Yes	Yes				R	Yes	64-QFN
Alaska 88E1118R 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						with PNP	Yes	Yes	Yes	Yes	Yes	Yes			R	Yes	64-QFN
Alaska 88E1119R 10/100/1000BASE-T PHY with GMII	1	Yes					Yes	Yes							with PNP	Yes	Yes	Yes	Yes	Yes	Yes	Yes		G	Yes	72-QFN
Alaska 88E1310 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						LDO	Yes	Yes	Yes		Yes				G	Yes	48-QFN
Alaska 88E1318 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						LDO	Yes	Yes	Yes		Yes				G	Yes	48-QFN
Alaska 88E1310S 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						LDO	Yes	Yes	Yes		Yes				G	Yes	48-QFN

*RoHS 6/6 + Halogen-Free

ALASKA® Series

Transceivers	Number of Ports	10/100/1000BASE-T	100BASE-FX	1000BASE-X	SGMII (Line)	SFP	MII	GMII	RGMII	SGMII (MAC)	TBI	RTBI	SerDes	QSGMII	Internal Regulator	Integrated Passives	Virtual Cable Tester	Programmable LED	JTAG	125MHz CLK OUT	I-Temp	Energy Efficient Ethernet (EEE)	RoHS 6/6, Green*	Production	Package Type
Alaska 88E1318S 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						LDO	Yes	Yes	Yes		Yes			G	Yes	48-QFN
Alaska 88E1510 EEE 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						Switching Regulator	Yes	Yes	Yes		Yes	Yes	Yes	G	Yes	48-QFN
Alaska 88E1512 EEE 10/100/1000BASE-T PHY with RGMII, SGMII, Copper/Fiber Automedia Detect	1	Yes	Yes	Yes	Yes	Yes			Yes	Yes					Switching Regulator	Yes	Yes	Yes		Yes	Yes	Yes	G	Yes	56-QFN
Alaska 88E1514 EEE 10/100/1000BASE-T PHY with SGMII, Copper / Fiber Automedia Detect	1	Yes			Yes										Switching Regulator	Yes	Yes	Yes		Yes		Yes	G	Yes	56-QFN
Alaska 88E1518 EEE 10/100/1000BASE-T PHY with RGMII	1	Yes							Yes						Switching Regulator	Yes	Yes	Yes		Yes		Yes	G	Yes	48-QFN
Dual-Port Devices																									
Alaska 88E1121R 10/100/1000BASE-T PHY with RGMII	2	Yes							Yes							Yes	Yes	Yes	Yes				R	Yes	100-TQFP
Alaska 88E1322 10/100/1000BASE-T PHY with SGMII, SyncE, IEEE 1588 Time Stamping, Copper/Fiber Automedia Detect	2	Yes	Yes	Yes	Yes	Yes				Yes						Yes	Yes	Yes	Yes	Yes	Yes		G	Yes	196 TFBGA
Quad-Port Devices																									
Alaska 88E1143 100/1000Mbps Fiber Transceiver	4		Yes	Yes	Yes			Yes	Yes								Yes	Yes	Yes		Yes		R	Yes	364-PBGA
Alaska 88E1145 10/100/1000BASE-T PHY with SGMII /SERDES	4	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes		Yes		R	Yes	364-HSBGA

*RoHS 6/6 + Halogen-Free

ALASKA® Series

Transceivers	Number of Ports	10/100/1000BASE-T	100BASE-FX	1000BASE-X	SGMII (Line)	SFP	MII	GMII	RGMII	SGMII (MAC)	TBI	RTBI	SerDes	QSGMII	Internal Regulator	Integrated Passives	Virtual Cable Tester	Programmable LED	JTAG	125MHz CLK OUT	I-Temp	Energy Efficient Ethernet (EEE)	RoHS 6/6, Green*	Production	Package Type
Alaska 88E1240 10/100/1000BASE-T PHY with SGMII	4	Yes	Yes	Yes						Yes							Yes	Yes	Yes				R	Yes	Multiple Packages
Alaska 88E1340 10/100/1000BASE-T PHY with SGMII, QSGMII, Copper/ Fiber Automedia Detect, SyncE, IEEE 1588 Time-stamping	4	Yes	Yes	Yes	Yes	Yes				Yes				Yes		Yes	Yes	Yes	Yes	Yes			G	Yes	196-TFBGA
Alaska 88E1340S 10/100/1000BASE-T PHY with SGMII, QSGMII, Copper/ Fiber Automedia Detect, SyncE, IEEE 1588 Time-stamping	4	Yes	Yes	Yes	Yes	Yes				Yes				Yes		Yes	Yes	Yes	Yes	Yes		Yes	G	Yes	196-TFBGA
Alaska 88E1543 EEE 10/100/1000BASE-T PHY with SGMII	4	Yes	Yes	Yes	Yes	Yes				Yes						Yes	Yes	Yes	Yes	Yes			G	Yes	128-LQFP
Alaska 88E1545 EEE 10/100/1000BASE-T PHY with QSGMII	4	Yes												Yes		Yes	Yes	Yes	Yes	Yes			G	Yes	128-LQFP
Octal-Port Devices																									
Alaska 88E1680 EEE 10/100/1000BASE-T PHY with QSGMII plus PTP, SyncE	8	Yes												Yes		Yes	Yes	Yes	Yes	Yes			G	Yes	128-LQFP
Alaska 88E1685 EEE 10/100/1000BASE-T PHY with QSGMII	8	Yes												Yes		Yes	Yes	Yes	Yes	Yes			G	Yes	128-LQFP

*RoHS 6/6 + Halogen-Free

ALASKA® M Series

Transceivers

	Number of Ports	10/100/1000BASE-T	100BASE-FX	1000BASE-X	SGMII (Line)	SFP	EEE	SGMII (MAC)	QSGMII	Core Voltage	Digital I/O	Analog Voltage	Integrated Passives	Virtual Cable Tester	Programmable LED	JTAG	I-Temp	Energy Efficient Ethernet (EEE)	PTP (IEEE 1588-2008, 2-step), SyncE	1 Step PTP	RoHS 6/6, Green*	Production	Package Type	LinkCrypt® (MACSec)
Quad-Port Devices																								
Alaska 88E1540M EEE 10/100/1000BASE-T PHY with QSGMII plus MACSec	4	Yes			Yes		Yes		Yes	1.0V	1.2V/1.8V/2.5V/3.3V	1.8V/3.3V	Yes	Yes	Yes	Yes		Yes	Yes		G	Yes	196-TFBGA	Yes
Alaska 88E1543M EEE 10/100/1000BASE-T PHY with SGMII plus MACSec	4	Yes	Yes	Yes	Yes		Yes	Yes		1.0V	2.5V/3.3V	1.8V/3.3V	Yes	Yes	Yes	Yes		Yes			G	Yes	128-LQFP	Yes
Alaska 88E1545M EEE 10/100/1000BASE-T PHY with QSGMII plus MACSec	4	Yes			Yes		Yes		Yes	1.0V	1.2V/1.8V/2.5V/3.3V	1.8V/3.3V	Yes	Yes	Yes	Yes		Yes			G	Yes	128-LQFP	Yes
Alaska 88E1548M EEE 10/100/1000BASE-T PHY with SGMII plus MACSec, Auto-Media Detect	4	Yes	Yes	Yes	Yes		Yes	Yes	Yes	1.0V	1.2V/1.8V/2.5V/3.3V	1.8V/3.3V	Yes	Yes	Yes	Yes		Yes	Yes		G	Yes	196-TFBGA	Yes
Alaska 88E1548P EEE 10/100/100 BASE-T PHY with SGMII plus MACsec, Auto-Media Detect, 1-step PTP	4	Yes	Yes	Yes	Yes	Yes		Yes	Yes	1.0V	1.2V/1.8V/2.5V/3.3V	1.8V/3.3V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	G	Yes	196-TFBGA	Yes
Octal-Port Devices																								
Alaska 88E1680M EEE 10/100/1000BASE-T PHY with QSGMII plus MacSec, PTP, SyncE	8	Yes							Yes	0.9V	1.5V/1.8V/2.5V/3.3V	1.5V/1.8V	Yes	Yes	Yes	Yes		Yes	Yes	Yes	G	Yes	128-LQFP	Yes

*RoHS 6/6 + Halogen-Free

ALASKA® X Series

Transceivers	Number of Ports	10GBASE-SR/ER/LR	10GBASE-SW/EW/LW	10GBASE-LRM	100Mb/1Gb/10GBASE-T	XAUI	XGMII	RXAUI	XFI	SFI	XENPAK	X2	XFP	SFP/SFP	Twinax	CR	Programmable LED	JTAG	Reference Clock	I-Temp	RoHS 6/6, Green*	Production	Package Type
Single-Port Devices																							
Alaska X 88X2010 XAUI to XFI Serial 10G SERDES (LAN PHY)	1	Yes				Yes					Yes	Yes	Yes				Yes	Yes	156.25/159.375 MHz		Yes	Yes	256-TFBGA
Alaska X 88X2011 XAUI to XFI Serial 10G SERDES (WAN & LAN PHY)	1	Yes	Yes			Yes					Yes	Yes	Yes				Yes	Yes	156.25/159.375 MHz, 155.52 MHz (WIS)	Yes	Yes	Yes	256-TFBGA
Alaska X 88X2012 XAUI to XFI Serial 10G SERDES (LAN PHY)	1	Yes					Yes						Yes				Yes	Yes	156.25/159.375 MHz		Yes	Yes	256-TFBGA
Alaska X 88X2013 XAUI to XFI Serial 10G SERDES (WAN & LAN PHY)	1	Yes	Yes				Yes						Yes				Yes	Yes	156.25/159.375 MHz, 155.52 MHz (WIS)		Yes	Yes	256-TFBGA
XGXS Devices																							
Alaska X 88X2040 10GE XAUI and 4 Channel 3.125 Gigabit per second SERDES	1					Yes	Yes				Yes	Yes					Yes	Yes	62.5/125/156.25/159.375 MHz		Yes	Yes	256-TFBGA
Alaska X 88X2080 Dual XAUI to XGMII SERDES	2					Yes	Yes				Yes	Yes					Yes	Yes	62.5/125/156.25/159.375 MHz		Yes	Yes	448-PBGA
Alaska X 88X2120 10GE RXAUI and 4 Channel 3.125 Gigabit per second SERDES	2	Yes		Yes				Yes	Yes	Yes			Yes	Yes	Yes		Yes	Yes	156.25		Yes	Yes	196-HFCBGA
Alaska X 88X2140 10GE RXAUI and 4 Channel 3.125 Gigabit per second SERDES	4	Yes		Yes				Yes	Yes	Yes			Yes	Yes	Yes		Yes	Yes	156.25		Yes	Yes	400-FCBGA

*RoHS 6/6 + Halogen-Free

ALASKA® X Series

Transceivers	Number of Ports	10GBASE-SR/ER/LR	10GBASE-SW/EW/LW	10GBASE-LRM	100Mb/1Gb/10GBASE-T	XAUI	XGMII	RXAUI	XFI	SFI	XENPAK	X2	XFP	SFP/SFP	Twinax	CR	Programmable LED	JTAG	Reference Clock	I-Temp	RoHS 6/6, Green*	Production	Package Type
Cu Devices																							
Alaska X 88X3120	2					Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes	Yes	Yes	25, 156.25 MHz		Yes	Yes	676-HFCBGA
Alaska X 88X3140	4					Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes	Yes	Yes	25, 156.25 MHz		Yes	Yes	676-HFCBGA

*RoHS 6/6 + Halogen-Free

ALASKA® X M Series

Transceivers	Number of Ports	10GBASE-SR/ER/LR	10GBASE-SW/EW/LW	10GBASE-LRM	XAUI	XGMII	RXAUI	XFI	SFI	XENPAK	X2	XFP	SFP/SFP	Twinax	Core Voltage	Digital I/O	Analog Voltage	Programmable LED	JTAG	Reference Clock	I-Temp	RoHS 6/6, Green*	SyncE	Production	Package Type	LinkCrypt® (MACSec)
XGXS Devices																										
Alaska X 88X2120M 10GE RXAUI and 4 Channel 3.125 Gigabit per second SERDES	2	Yes		Yes			Yes	Yes	Yes			Yes	Yes	Yes	0.9V	2.5V/3.3V	1.2V	Yes	Yes	156.25		Yes		Yes	196-HFCBGA	Yes
Alaska X 88X2140M 10GE RXAUI and 4 Channel 3.125 Gigabit per second SERDES	4	Yes		Yes			Yes	Yes	Yes			Yes	Yes	Yes	0.9V	2.5V/3.3V	1.2V	Yes	Yes	156.25		Yes	Yes	Yes	400-FCBGA	Yes

*RoHS 6/6 + Halogen-Free

ALASKA® X 10GBase-T

Transceivers	Number of Ports	10GBASE-SR/ER/LR	10GBASE-SW/EW/LW	10GBASE-LRM	100Mb/1Gb/10GBASE-T	EEE	XAUI	XGMII	RXAUI	XFI	SFI	XENPAK	X2	XFP	SFP/SFP+	Twinax	CR	Core Voltage	Digital I/O	Analog Voltage	Programmable LED	JTAG	Reference Clock	I-Temp	RoHS 6/6, Green	SyncE	Production	Package Type	LinkCrypt® (MACSec)
Cu Devices																													
Alaska X 88X3120M	2					Yes	Yes	Yes	Yes	Yes	Yes					Yes	Yes		Yes	0.75V	0.75V/1.2V/1.8V/2.2	1.2V/1.8V	Yes	Yes	25, 156.25 MHz		Yes		Yes	676-HFCBGA	Yes
Alaska X 88X3140M	4					Yes	Yes	Yes	Yes	Yes	Yes					Yes	Yes		Yes	0.75V	0.75V/1.2V/1.8V/2.2	1.2V/1.8V	Yes	Yes	25, 156.25 MHz		Yes		Yes	676-HFCBGA	Yes

Marvell

A NEXT GENERATION SEMICONDUCTOR COMPANY

Founded in 1995, Marvell Technology Group Ltd. has operations worldwide and more than 7,000 employees. Marvells U.S. operating subsidiary is based in Santa Clara, California and Marvell has international design centers located in China, Europe, Hong Kong, India, Israel, Japan, Malaysia, Singapore, Taiwan and the U.S. A leading fabless semiconductor company, Marvell ships over one billion chips a year. Marvells expertise in microprocessor architecture and digital signal processing, drives multiple platforms including high volume storage solutions, mobile and wireless, networking, consumer and green products. World class engineering and mixed-signal design expertise helps Marvell deliver critical building blocks to its customers, giving them the competitive edge to succeed in todays dynamic market.

Key Markets

MOBILE AND WIRELESS:
From laptops to smart phones to gaming devices and from the home to the office to a hotel room: wireless and mobile technologies now touch nearly every facet of our lives. Marvell offers industry leading power management for extended battery life with exceptional ease of use and security. Marvell solutions power the complete value chain of mobile and wireless devices, providing full-featured, media-rich experiences and robust services to everyone from the business user to the consumer.

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CLOUD SERVICES AND INFRASTRUCTURE: Marvell cloud services products are designed for the utmost reliability and resiliency. From robust enterprise networking applications to consumer and small business solutions Marvells cloud services products seamlessly power every point in the cloud and networking ecosystem and ensure that it just works.

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GREEN TECHNOLOGY: Marvell is committed to developing green technology as both a supplier and user of technology to save energy and to help reduce our collective carbon footprint. Marvell is developing innovative ICs for digital LED driver and control, smart lighting control platforms for commercial and residential applications, and Wi-Fi microcontroller and networking software for Smart appliances.

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KEY FACTS

Founded: 1995

Stock Symbol: MRVL (NASDAQ)

Chairman and Chief Executive Officer: Dr. Sehat Sutardja

Worldwide Employment: More than 7,000

Net Revenues: $3.17 billion (fiscal 2013, ended February 2, 2013)

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