



2013 Marvell Product Selector Guide

TOTAL SOLUTIONS FROM MARVELL

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

TABLE OF CONTENTS

Application Processors	2
Communication Processors	6
Embedded Processors	7
Ethernet Controllers	9
Gateways	10
LED Lighting	11
Network Processors	12
PCI Bridges	14
Power Management	15
Storage	20
SOHO Switching	24
Switching	29
System Controllers	32
Transceivers	34
Video Processors and Hybrid Demodulator	39
Wireless	41
About Marvell	43

ARMADA™ Series

Application Processors

Frequency
Device Support
Boot Configuration
Security Support
I/O Voltage
Software
Package Size
Ball Pitch
Package Type
I-Temp*
Special Note

ARMADA 100 Family

88AP162-B0-BJD2C004	400MHz	6 chip selects	Auto-boot configuration	No	1.8v, 3.3v	Linux, Adobe® FlashLite, Android, Windows® CE	15mm x 15mm	0.8mm	Discrete	*	
88AP166-B0-BJD2C008	800MHz	6 chip selects	Auto-boot configuration	No	1.8v, 3.3v	Linux, Adobe® FlashLite, Android, Windows® CE	15mm x 15mm	0.8mm	Discrete	Yes	
88AP168-B0-BJD2C010	1000MHz	6 chip selects	Auto-boot configuration	No	1.8v, 3.3v	Linux, Adobe® FlashLite, Android, Windows® CE	15mm x 15mm	0.8mm	Discrete	Yes	

ARMADA 500 Family

88AP510-A1-BJV2C008	800MHz	7 chip selects	Auto-boot configuration	No	1.0v, 1.1v, 1.5v, 1.8v, 2.5v, 3.3v	Ubuntu Linux, Android, Adobe® Flash	27mm x 27mm	1.0mm	Discrete	*	
88AP510-A1-BJV2C010	1000MHz	7 chip selects	Auto-boot configuration	No	1.0v, 1.1v, 1.5v, 1.8v, 2.5v, 3.3v	Ubuntu Linux, Android, Adobe® Flash	27mm x 27mm	1.0mm	Discrete	*	

ARMADA 600 Family

88AP610-A1-BKF2C008-TUNV	800MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	12mm x 12mm	0.5mm	POP	*	
88AP610-A1-BLO2C008-TUNV	800MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	16mm x 16mm	0.5mm	Discrete	*	
88AP610-A1-BLO2C010-TUNV	1000MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	16mm x 16mm	0.5mm	Discrete	*	
88AP610-A1-BLT2A008-TUNV	800MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	21mm x 21mm	0.65mm	Discrete	*	Automotive Grade
88AP610-A1-BLT2C008-TUNV	800MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	21mm x 21mm	0.65mm	Discrete	*	
88AP610-A1-BLT2C010-TUNV	1000MHz	7 chip selects	Auto-boot configuration	Yes	1.2v, 1.5v, 1.8v, 3.0v, 3.3v	Linux, Android, Adobe® Flash	21mm x 21mm	0.65mm	Discrete	*	

*Parts available in temperature range -25C to 85C.

PXA Series

Application Processors

Frequency
Device Support
Boot Configuration
Security Support
I/O Voltage
Software
Package Size
Ball Pitch
Package Type
I-Temp*
Special Note

PXA300 Family

88AP300-A1-BGK2C624-T161	624MHz	8 chip selects	x16 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP300-A1-BGK2C624-T162	624MHz	8 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP300-A1-BGK2C624-T163	624MHz	8 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP300-A1-BGK2C208-T164	208MHz	8 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP303-A1-BGF2C624-TN12	624MHz	8 chip selects	x16 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	19mm x 19mm	0.8mm	Discrete	*	
88AP303-A1-BGF2C624-TN22	624MHz	8 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	19mm x 19mm	0.8mm	Discrete	*	
88AP303-A1-BGF2C208-TN22	208MHz	8 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	19mm x 19mm	0.8mm	Discrete	*	
88AP303-A1-BGF2C624-TN32	624MHz	8 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	19mm x 19mm	0.8mm	Discrete	*	
88AP303-A1-BGF2C208-TN32	208MHz	8 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	19mm x 19mm	0.8mm	Discrete	*	

PXA310 Family

88AP310-B1-BGK2C624-TN02	624MHz	8 chip selects	Auto-boot configuration	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP310-B1-BGK2C624-TS02	624MHz	8 chip selects	Auto-boot configuration	Yes (trusted)	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP310-B1-BGK2C806-TN02	806MHz	8 chip selects	Auto-boot configuration	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	

*Parts available in temperature range -25C to 85C.

PXA Series

Application Processors

Frequency
Device Support
Boot Configuration
Security Support
I/O Voltage
Software
Package Size
Ball Pitch
Package Type
I-Temp*
Special Note

PXA320 Family											
88AP320-C0-BGR2C624-TN30	624MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Low power
88AP320-C0-BGR2C806-TN31	806MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Standard power
88AP320-C0-BGR2C806-TN30	806MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Low power
88AP320-C0-BGR2C624-TN10	624MHz	6 chip selects	x16 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Low power
88AP320-C0-BGR2C806-TN10	806MHz	6 chip selects	x16 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Low power
88AP320-C0-BGR2C806-TN11	806MHz	6 chip selects	x16 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Standard power
88AP320-C0-BGR2C624-TN20	624MHz	6 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Low power
88AP320-C0-BGR2C624-TN21	624MHz	6 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Standard power
88AP320-C0-BGR2C806-TN21	806MHz	6 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	*	Standard power
88AP320-C0-BGR2E806-TN21	806MHz	6 chip selects	x8 NAND	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	14mm x 14mm	0.5mm	Discrete	Yes	Standard power
PXA270 Family											
88AP270MA2-BGO2C312	312MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP270MA2-BGO2C416	416MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	

*Parts available in temperature range -25C to 85C.

PXA Series

Application Processors

	Frequency	Device Support	Boot Configuration	Security Support	I/O Voltage	Software	Package Size	Ball Pitch	Package Type	I-Temp*	Special Note
88AP270MA2-BGO2C520	520MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP270MA2-BGO2C624	624MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	13mm x 13mm	0.5mm	Discrete	*	
88AP270MA2-BHE1C312	312MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	*	
88AP270MA2-BHE1E312 (Extended Temp)	312MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	Yes	
88AP270MA2-BHE1C416	416MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	*	
88AP270MA2-BHE1E416 (Extended Temp)	416MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	Yes	
88AP270MA2-BHE1C520	520MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	*	
88AP270MA2-BHE1C624	624MHz	6 chip selects	x16 NOR	No	1.8v - 3.3v	Linux, Windows® CE, Windows® Mobile	23mm x 23mm	1.0mm	Discrete	*	

*Parts available in temperature range -25C to 85C.

Pantheon and PXA Series

Marvell Semiconductor provides the PXA family of cellular FFOS platform solutions for the EDGE and 3G protocols. Marvell's highly integrated cellular products lead the industry with high-tier multi-media FFOS performance at mid-tier BOM pricing.

Please contact your Marvell field sales office for more details on the PXA family of cellular products.

ARMADA Series

Embedded Processors

ARMADA 300 Family													
Part Numbers	CPU Base Architecture	I/O Support	Frequency	Number of Issues	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software	
88F6282 High-performance CPU	ARM®v5TE Single Core	2 x GbE, 2 x PCIe (x1), 1 x USB, 2 x UART, 2 x SATA, Native NAND, SPI	1.2GHz, 1.6GHz, 2.0GHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit, DDR3-1066, DDR2-800	15mm x 15mm	304-HFCBGA	0.65mm		DB-88F6282-A0, RD-88F6282-A0	u-boot, Linux, vxWorks and others	
88F6283 Low-power CPU	ARM®v5TE Single Core	2 x GbE, 2 x PCIe (x1), 1 x USB, 2 x UART, 2 x SATA, Native NAND, SPI	600MHz, 800MHz, 1.0GHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit, DDR3-1066, DDR2-800	15mm x 15mm	304-FCBGA	0.65mm		DB-88F6282-A0, RD-88F6282-A0	u-boot, Linux, vxWorks and others	

DISCOVERY INNOVATION Series

Embedded Processors

Part Numbers	CPU Base Architecture	I/O Support	Frequency	Number of Issues	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software	
MV78200 SoC with Dual-Core Dual-Issue Marvell CPU	ARM®v5TE Dual Core	4 x GbE, 2 x PCIe (1 x4 or 4 x1), 3 x USB, 4 x UART, 2 x SATA, 32 bit Device bus	800MHz, 1.0GHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D per core; L2: 512KB unified per core	32/64-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm	Yes	DB-MV78200-A1	u-boot, Linux, vxWorks and others	
MV78100 SoC with Dual-Core Dual-Issue Marvell CPU	ARM®v5TE Single Core	2 x GbE, 2 x PCIe (1 x4 or 4 x1) (1 x1), 3 x USB, 4 x UART, 1 x SATA, 32 bit Device bus	800MHz, 1.0GHz, 1.2GHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D; L2: 512KB unified	32/64-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm	Yes	DB-MV78100-A1	u-boot, Linux, vxWorks and others	
MV76100 SoC with Dual-Core Dual-Issue Marvell CPU	ARM®v5TE Single Core	2 x GbE, 2 x PCIe (1 x4 or 4 x1) (1 x1), 3 x USB, 4 x UART, 1 x SATA, 32 bit Device bus	600MHz, 800MHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D; L2: 256KB unified	32-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm		DB-MV76100-A1	u-boot, Linux, vxWorks and others	

KIRKWOOD™ DUO Series

Embedded Processors

88F6321
SoC with Dual-Core Dual-Issue Marvell CPU

88F6322
SoC with Dual-Core Dual-Issue Marvell CPU

88F6323
SoC with Dual-Core Dual-Issue Marvell CPU

Part Numbers	CPU Base Architecture	I/O Support	Frequency	Number of Issues	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software
88F6321	ARM®v5TE Dual Core	2 x GbE, PCIe (x1), 1 x USB, 2 x UART, 8 bit Device bus	600MHz, 800MHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D; L2: 256K/ Core	32-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm		DB-88F6323-A1	u-boot, Linux, vxWorks and others
88F6322	ARM®v5TE Dual Core	2 x GbE, 2 x PCIe (x1), 2 x USB, 2 x UART, 8 bit Device bus	600MHz, 800MHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D; L2: 256K/ Core	32-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm		DB-88F6323-A1	u-boot, Linux, vxWorks and others
88F6323	ARM®v5TE Dual Core	3 x GbE, 2 x PCIe (x1), 3 x USB, 2 x UART, 1 x SATA, 8 bit Device bus	600MHz, 800MHz, 1.0GHz	Dual-Issue w/FPU	L1: 32KB-I, 32KB-D; L2: 256K/ Core	32-bit DDR2-800 with ECC	27mm x 27mm	655-FCBGA	1.0mm		DB-88F6323-A1	u-boot, Linux, vxWorks and others

KIRKWOOD™ Series

Embedded Processors

88F6281
SoC with Dual-Core Dual-Issue Marvell CPU

88F6192
SoC with Dual-Core Dual-Issue Marvell CPU

88F6180
SoC with Dual-Core Dual-Issue Marvell CPU

88F6280
SoC with Dual-Core Dual-Issue Marvell CPU

Part Numbers	CPU Base Architecture	I/O Support	Frequency	Number of Issues	Cache	DDR Controller	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Board	Software
88F6281	ARM®v5TE Single Core	PCIe (x1), 2 x GbE, 1 x USB2.0, 2 x SATA, 2 x UART, 8 bit Device bus	800MHz, 1.0GHz, 1.2GHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit DD R2-800	19mm x 19mm	288-HSBGA	1.0mm		RD-88F6281-A-BGA	u-boot, Linux, vxWorks and others
88F6192	ARM®v5TE Single Core	PCIe (x1), 2 x GbE, 1 x USB2.0, 2 x SATA, 2 x UART, 8 bit Device bus	600MHz, 800MHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit DD R2-400	24mm x 24mm	216-LQFP	0.4mm		RD-88F6192-A-QFP	u-boot, Linux, vxWorks and others
88F6180	ARM®v5TE Single Core	PCIe (x1), 1 x GbE, 1 x USB2.0, 1 x UART, 8 bit Device bus	800MHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit DD R2-400	13mm x 13mm	244-TSBGA	0.8mm		DB-88F6180-A-BGA	u-boot, Linux, vxWorks and others
88F6280	ARM®v5TE Single Core	1 x GbE, 1 x USB2.0, 2 x UART, 8 bit Device bus	600MHz, 800MHz, 1.0GHz	Single-Issue	L1: 16KB-I, 16KB-D; L2: 256KB unified	16-bit DD R2-400	14mm x 20mm	128-LQFP	0.5mm		DB-88F6280-A1	u-boot, Linux, vxWorks and others

YUKON[®] Series

ETHERNET CONTROLLERS

	Ordering Part Numbers	Media Support	Bus Interface	Integrated On Chip Buffer	Package Size	Package Type	I-Temp	Software	Boot-ROM Support	Virtual Cable Tester Support
Yukon FE 88E8040 PCI Express Fast Ethernet Controller	88E8040-A0-NNB2-C000	10/100 BASE-T Copper	x1 PCI Express	3KB Rx 2KB Tx RAM	7mm x 7mm	48QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon FE 88E8040 PCI Express Fast Ethernet Controller	88E8040-A0-NNC2-C000	10/100 BASE-T Copper	x1 PCI Express	3KB Rx 2KB Tx RAM	9mm x 9mm	64QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon Ultra II 88E8057 PCI Express Gigabit Ethernet Controller	88E8057-A0-NNB2-C000	10/100/1000 BASE-T Copper	x1 PCI Express	16KB Rx 10KB Tx RAM	7mm x 7mm	48QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon Ultra II 88E8057 PCI Express Gigabit Ethernet Controller	88E8057-A0-NNC2-C000	10/100/1000 BASE-T Copper	x1 PCI Express	16KB Rx 10KB Tx RAM	9mm x 9mm	64QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon Ultra II 88E8057 PCI Express Gigabit Ethernet Controller	88E8057-A0-NNC2-1000	10/100/1000 BASE-T Copper	x1 PCI Express	16KB Rx 10KB Tx RAM	9mm x 9mm	64QFN	Yes	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon Optima 88E8059 PCI Express Gigabit Ethernet Controller with AVB	88E8059-A0-NNB2-C000	10/100/1000 BASE-T Copper	x1 PCI Express	16KB Rx 10KB Tx RAM	7mm x 7mm	48QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes
Yukon Optima 88E8059 PCI Express Gigabit Ethernet Controller with AVB	88E8059-A0-NNC2-C000	10/100/1000 BASE-T Copper	x1 PCI Express	16KB Rx 10KB Tx RAM	9mm x 9mm	64QFN	No	Drivers- Windows [®] XP/2003, Windows [®] 7 and Vista/Server 2008 and Linux	Yes	Yes

LINK STREET[®] Series

Gateways

	CPU	Memory	Port Configuration	Evaluation Board	Cache	GPIO	MAC Size	Power	Package Size	Package Type	Priority, 4 Queues per Port	QoS IEEE 802.1p	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		

LED Drivers

LED Lighting

Part Numbers
Topology
Power Factor Correction
Total Harmonic Distortion
Input Voltage Range
Output Power
Switching Frequency
Dimming
Other Features
Package Type

88EM8082	88EM8082A1-SAG2C000	AC/DC Single-stage flyback LED Driver	0.99	<10%	Universal Input	0 to 150W (w/ external FET)	120kHz	PWM compatible	OCP, OVP, OTP	8-pin SOIC
88EM8042	88EM8042A1-SAG2C000	AC/DC Single-stage flyback Contant Voltage offline Controller	0.99	<20%	Universal Input	0 to 150W (w/ external FET)	120kHz	PWM compatible	OCP, OVP, OTP	8-pin SOIC
88EM8801	88EM8801B0-SAG2C000	2- channel DC/DC Buck PWM Dimming LED Driver	NA	NA	10-40VDC	0-20W	200 to 800kHz	0-10V, I2C, PWM	Two LED channel color mixing, OVP, OCP, OTP	28-pin 4x4 QFN
88EM8183	88EM8183A0-SAE2C000	Triac Dimmable Primary Side Regulated AC/DC flyback LED Driver	0.95	<20%	Low Line: (100-120) +/-15%, High Line: (220-240) +/-15%	0-100W	90KHz to 220kHz	TRIAC	Valley switching, OTP, OVP, Short circuit protection and open LED string protection	8-pin SOIC-EP
88EM8182	88EM8182A0-SAE2C000-AL00	Non-Dimmable Primary Side Regulated AC/DC Flyback LED Driver	0.95	<20%	Universal Input	0-100W	90KHz to 220kHz	Non-dimmable	Valley switching, OTP, OVP, Short circuit protection and open LED string protection	8-pin SOIC-EP

XELERATED[®] NPU

Network Processors

Part Numbers
Line Interfaces
System Interfaces
Evaluation Boards
Integrated Ethernet PHY/MAC
Package Size
Package Type
I-Temp

X11 NPU Series

Xelerated X11-D240	98NP0240C2-BPT-C000	24 SGMII, 4 XAUI	2 SPI-4.2	XEL-13011-2, XEL-13012-2	24 GE, 4 10GE	40mm x 40mm	HFCBGA	No
Xelerated X11-D240 Lead Free	98NP0240C2-BPT2C000	24 SGMII, 4 XAUI	2 SPI-4.2	XEL-13011-2, XEL-13012-2	24 GE, 4 10GE	40mm x 40mm	HFCBGA	No

HX NPU Series

Xelerated HX320 100 Gbps Carrier Ethernet Network Processor	98HX0320B2-BPR-C000	48 SGMII, QSGMII, 12 XAUI, 3 Interlaken	Interlaken XAUI	XEL-13020-1, XEL-13020-2	48 GE (16 2.5GE), 12 10GE	45mm x 45mm	HFCBGA	No
Xelerated HX330 100 Gbps Carrier Ethernet Network Processor with integrated Traffic Manager	98HX0330B2-BPR-C000	48 SGMII, QSGMII, 12 XAUI, 3 Interlaken	Interlaken XAUI	XEL-13020-1, XEL-13020-2	48 GE (16 2.5GE), 12 10GE	45mm x 45mm	HFCBGA	No
Xelerated HX326 100 Gbps Carrier Ethernet Network Processor for 100GE/OTU 4 applications	98HX0326B2-BPR-C000	48 SGMII, QSGMII, 12 XAUI, 3 Interlaken	Interlaken, 100G clear-channel XAUI	XEL-13020-1, XEL-13020-2	48 GE (16 2.5GE), 12 10GE	45mm x 45mm	HFCBGA	No
Xelerated HX336 100 Gbps Carrier Ethernet Network Processor with integrated Traffic Manager for 100GE/OTU4 applications	98HX0336B2-BPR-C000	48 SGMII, QSGMII, 12 XAUI, 3 Interlaken	Interlaken, 100G clear-channel XAUI	XEL-13020-1, XEL-13020-2	48 GE (16 2.5GE), 12 10GE	45mm x 45mm	HFCBGA	No

AX Programmable Ethernet Switches

Xelerated AX210 Programmable Ethernet Switch	98AX0210B2-BPS2C000	32 SGMII, QSGMII, 10 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	32 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Option
Xelerated AX240 Programmable Ethernet Switch with integrated Traffic Manager	98AX0240B2-BPS2C000	32 SGMII, QSGMII, 10 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	32 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Option
Xelerated AX310 Programmable Ethernet Switch	98AX0310B2-BPS2C000	48 SGMII, QSGMII, 12 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	48 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Option

XELERATED[®] NPU

Network Processors

	Part Numbers	Line Interfaces	System Interfaces	Evaluation Boards	Integrated Ethernet PHY/MAC	Package Size	Package Type	I-Temp
Xelerated AX340 Programmable Ethernet Switch with integrated Traffic Manager	98AX0340B2-BPS2C000	48 SGMII, QSGMII, 12 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	48 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Option
Xelerated AX210 Industrial Grade	98AX0210B2-BPS2I000	32 SGMII, QSGMII, 10 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	32 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Yes
Xelerated AX240 Industrial Grade	98AX0240B2-BPS2I000	32 SGMII, QSGMII, 10 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	32 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Yes
Xelerated AX310 Industrial Grade	98AX0310B2-BPS2I000	48 SGMII, QSGMII, 12 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	48 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Yes
Xelerated AX340 Industrial Grade	98AX0340B2-BPS2I000	48 SGMII, QSGMII, 12 XAUI, 2 Interlaken	Interlaken XAUI	XEL-13020	48 GE (16 2.5GE), 12 10GE	40mm x 40mm	HFCBGA	Yes

PCI Express to PCI Bridges

PCI Bridges

88SB2211
PCI Express to PCI Bridge

Part Number	Lanes	Max Payload Size	Bus Interface	PCI Bus Type	Reverse Mode	PCI Masters	GPIO	Power	Package Size	Package Type	I-Temp	Evaluation Board
88SB2211	1	128 Bytes	PCI-e to PCI	32-bit, 33MHz	Yes	5	8	0.7W	14mm x 20mm	128 LQFP		DB-88SB2211-B-PCI2PEX DB-88SB2211-B-PEX2PCI

DC-DC REGULATORS
Series 1

Power Management									
Synchronous Buck Regulator									
Part Numbers	I _{out} (Max)	I _{Q 3} (I _{out} = 0)	V _{in}	TOP FET R _{DS(ON)} @5.0V	BOT FET R _{DS(ON)} @5.0V	Package Type	Features	I-Temp*	
MVPG16	MVPG16-NAE1	1.0A	1.0mA	3.0V to 5.5V	120m	70m	3mm x 4mm DFN-12	1MHz, Shutdown	Yes
88PG839	88PG839-NAE2	2.0A	25uA	2.7V to 5.5V	120m	80m	3mm x 4mm DFN-12	2MHz, Enable, PGood, OVP, SS	Yes
MVPG31	MVPG31-NAE1	2.0A	1.0mA	3.0V to 5.5V	120m	70m	3mm x 4mm DFN-12	1MHz, Shutdown	Yes
88PG878	88PG878-NFB1	5.0A	1.2mA	3.0V to 5.5V	9.5m	7.5m	3mm x 4mm QFN-18	1MHz, Enable, POR, OVP, +/-3% DC Accuracy	Yes
88PH8101	88PH8101-UBB1	Up to 20A	2.5mA	4.5V to 16V	External FET	External FET	TSSOP-16	500kHz, Enable, PGood, OVP, SS	Yes
88PH845	88PH845-NFB1	3.0A	2.7mA	4.5V to 16V	70m	35m	3mm x 4mm QFN-18	500kHz, Enable, PGood, OVP, SS	Yes

*Specifications over the -40C to 85C operating temperature ranges are assured by design, characterization, and correlation with statistical process controls.

DC-DC REGULATORS
Series 2

Power Management									
Synchronous Buck Regulator LDO									
Part Numbers	I _{out} (Max)	I _{Q 3} (I _{out} = 0)	V _{in}	TOP FET R _{DS(ON)} @5.0V	BOT FET R _{DS(ON)} @5.0V	Package Type	Features	I-Temp*	
MVPG15x	MVPG15x-NAE1	1.0A	1.7mA	3.0V to 5.5V	120m	70m	3mm x 4mm DFN-12	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown	Yes

*Specifications over the -40C to 85C operating temperature ranges are assured by design, characterization, and correlation with statistical process controls.

DC-DC REGULATORS Series 2

Power Management	Part Numbers	I _{out} (Max)	I _{Q 3} (I _{out} = 0)	V _{in}	TOP FET R _{DS(ON)} @5.0V	BOT FET R _{DS(ON)} @5.0V	Package Type	Features	I-Temp*
MVPG30x	MVPG30x-NAE1	2.0A	1.7mA	3.0V to 5.5V	120m	70m	3mm x 4mm DFN-12	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown	Yes
88PG817x	88PG817x-NAM1	1.0A	1.9mA	2.75V to 5.5V	67m	21m	3mm x 3mm QFN-16	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown, POR, OVP	Yes
88PG827x	88PG827x-NAM1	1.6A	1.9mA	2.75V to 5.5V	67m	21m	3mm x 3mm QFN-16	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown, POR, OVP	Yes
88PG837x	88PG837x-NAM1	2.0A	1.9mA	2.75V to 5.5V	67m	21m	3mm x 3mm QFN-16	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown, POR, OVP	Yes
88PG847x	88PG847x-NAM1	3.0A	1.9mA	2.75V to 5.5V	67m	21m	3mm x 3mm QFN-16	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown, POR, OVP	Yes
88PG849E	88PG849E-NAM2	3.0A	1.9mA	2.75V to 5.5V	67m	21m	3mm x 3mm QFN-16	LDO x Opt: B=3.3V, E = 2.5V 1MHz, Shutdown, POR, OVP	Yes
88PG8218	88PG8218-NAE2	1.2A	220uA	2.7V to 5.5V	150m	100m	3mm x 4mm DFN-12	250mA LDO, LDO output up to 5V, SS, Enable, 2.0MHz	Yes
88PG8318 (2 LDO)	88PG8318-NAE2	1.2A	85uA	2.7V to 5.5V	150m	100m	3mm x 4mm DFN-12	2 x 150mA LDO, LDO output 1.8V/2.5V, SS, Enable, 2.0MHz	Yes
88PW889	88PW889-CBD2	700mA	30uA	2.7V to 5.5V	150m	100m	WLCSP	100mA LDO, 2.0 MHz, for Mobile applications	Yes
88PG8111	88PG8111-NXS2	500mA	25uA	2.7V to 5.5V	320m	150m	3mm x 3mm QFN-20	50mA LDO, 2.7 MHz, for Mobile applications	Yes

*Specifications over the -40C to 85C operating temperature ranges are assured by design, characterization, and correlation with statistical process controls.

DC-DC REGULATORS

Series 3

Power Management

	Part Numbers	I _{OUT} (Max)	I _{Q 3} (I _{OUT} = 0)	V _{IN}	TOP FET R _{DS(ON)} @5.0V	BOT FET R _{DS(ON)} @5.0V	Package Type	Features	I-Temp*
Dual Synchronous Buck Regulator									
88PG8216	88PG8216-NFE1	1.0A/1.5A	2.1mA	2.75V to 5.5V	81m	37m	3mm x 4mm QFN-20	1MHz, Enable, Soft Start, POR, OVP	Yes
88PG8226	88PG8226-NFE1	1.5A/1.5A	2.1mA	2.75V to 5.5V	81m	37m	3mm x 4mm QFN-20	1MHz, Enable, Soft Start, POR, OVP	Yes
88PG8227	88PG8227-NFE1	1.5A/2.0A	2.1mA	2.75V to 5.5V	81m	37m	3mm x 4mm QFN-20	1MHz, Enable, Soft Start, POR, OVP	Yes
88PG8237	88PG8237-NFE1	2.0A/2.0A	2.1mA	2.75V to 5.5V	81m	37m	3mm x 4mm QFN-20	1MHz, Enable, Soft Start, POR, OVP	Yes
88PG865	88PG865-CBK2	3.0A/1.0A	75uA	2.7V to 4.8V	30m/68m @3.6V	22m/60m @3.6V	WLCSP-18, 0.4mm pitch	3.2MHz, +/-2% DC Accuracy, I2C Interface, Enable, Soft Start, POR, OVP	Yes
88PG867x	88PG867x-NNY2	3.0A/1.0A	75uA	2.7V to 5.5V	60m/125m	42m/110m	3mm x 4mm QFN-24	2.2MHz, +/-3% DC Accuracy, I2C Interface, Enable, Soft Start, POR, OVP	Yes
88PG868	88PG868-NNY2	3.0A/1.0A	75uA	2.7V to 5.5V	60m/125m	42m/110m	3mm x 4mm QFN-24	1.1MHz, +/-3% DC Accuracy, I2C Interface, Enable, Soft Start, POR, OVP	Yes
88PW886 (3 Buck 3 LDO)	88PW886-NAR2	300mA	90uA	2.7V to 5.5V	333m	210m	4mm x 4mm QFN-20	3 x LDO, 3 x buck, 1.5MHz	Yes
88PG8211 (2 Buck LDO)	88PG8211-NXS2	500mA	25uA	2.7V to 5.5V	320m @3.6V	150m @3.6V	3mm x 3mm QFN-20	50mA LDO, 2.7 MHz	Yes
88PG821A (2 Buck LDO)	88PG821A-NXS2	500mA	25uA	2.7V to 5.5V	320m @3.6V	150m @3.6V	3mm x 3mm QFN-20	50mA LDO, 2.7 MHz	Yes

*Specifications over the -40C to 85C operating temperature ranges are assured by design, characterization, and correlation with statistical process controls.

BackLight

Power Management

Backlight Driver IC

88PM8606	88PM8606-NNY2	3V to 4V	24.3V	60mA	3	3mm x 4mm QFN-24	RGB LEDs, Linear Regulator, PWM Vibrator	Yes
----------	---------------	----------	-------	------	---	------------------	--	-----

Audio Codec and Amplifiers

Power Management

Audio Codec

88CE156	88CE156-NAJ2	8kHz ~ 96kHz	2 Analog MICs	Stereo	Class-AB, 20mW @ 16	N/A	Class-AB, Stereo 1W @ 8	24-bit Sigma Delta	Single I2S/PDM	5mm x 5mm-32 QFN	5-Band Equalizer, Click and Pop Suppression	Yes
88PM805	88PM805-BPH2	8kHz ~ 48kHz	2 Analog or 4 Digital MICs	Stereo	Class-G, 53mW @ 16	Class-AB 40mW @ 32	Class-D, Mono 1W @ 8	24-bit Sigma Delta	Dual I2S/ PDM	6.5mm x 6.5mm BGA-66, 0.65mm pitch	PDM interface for external Loudspeaker, 5-Band Equalizer, Click and Pop Suppression, Ultra Low Power (6.5mW) Audio Playback	No

Highly Integrated PMIC

Power Management

Part Numbers	Vin	Number of Bucks	Number of LDOs	Max Iout (Buck/LDO)	Audio Codec	Package Type	Additional Features	I-Temp
88PM8607-BIX2, 88PG8607-BKG2	2.7V to 4.8V	3	15	1.5A / 300mA	HiFi Stereo Audio Codec with Headphone Amps, Earpiece Amp, 1W Loudspeaker Amp	7mm x 7mm BGA-169 (0.4mm pitch), 10mm x 10mm BGA-160 (0.65mm pitch)	Li-Ion Battery Charger, PWM Vibrator, On Key, GPADCs, Watchdog Timer	No
88PM8609-CBK2	2.7V to 4.8V	3	10	1.5A / 200mA	N/A	WLCSP-56, 0.4mm pitch	RTC, GPADCs, Watchdog Timer	No
88PM812-BNK2, 88PM812-BRF2	2.7V to 4.8V	5	19	3A / 300mA	HiFi Stereo Audio Codec with Headphone Amps, Earpiece Amp, 1W Loudspeaker Amp	6mm x 7mm BGA-171 (0.4mm pitch), 7mm x 8.5mm BGA-171 (0.5mm pitch)	RTC, GPADCs, Watchdog Timer, PWM Vibrator, Fuel Gauge (Software)	No
88PM800-BPI2	2.7V to 4.8V	5	19	3A / 300mA	N/A	8.5mm x 8.0mm BGA-112 (0.65mm pitch)	RTC, GPADCs, Watchdog Timer, PWM Vibrator, Fuel Gauge (Software)	No
88PM801-CBK2	2.7V to 4.8V	5	6	2A / 300mA	N/A	WLCSP-57, 0.4mm pitch	DVCs, Analog Tracking Buck Control, RTC, GPADCs	No

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
88SE6101 PCIe x1 to 1 PATA Controller	1P	PCI-Express x1	Tag and Native Command	No	No	N/A	600mW	9mm x 9mm	64-QFN		N/A	DB-88SE6101
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	4S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	HW RAID 0/1	1w	9mmx9mm	76-QFN	No	0.4mm	EV1-88SE9230
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	4S	PCI-Express 2.0x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	1w	100 Gbps, 150 Mpps	76-QFN	No	0.4mm	EV1-88SE9215
88SE9170	2S	PCI Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mmx7mm	56-QFN	Yes	0.4mm	EV1-88SE9170
88SE9172	2S	PCI Express 2.0 x1	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mmx7mm	56-QFN	Yes	0.4mm	EV1-88SE9172
88SE9182	2S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mmx7mm	56-QFN	Yes	0.4mm	EV1-88SE9182
88SE9186	2S	PCI-Express 2.0x2	Tag and Native Command	FIS-Based	Flash BIOS I/F	N/A	0.8w	7mmx7mm	56-QFN	Yes	0.4mm	EV1-88SE9186

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	88RC9580	8	PCI-Express 2.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	~8W	27mmx 27mm	676-FCBGA		1.0mm	DB1-88RC9580
88SE9548	88RC9548	4	PCI-Express 2.0 x8	Tag and Native Command	Yes	Flash BIOS I/F	Yes	N/A	~7W	27mm x 27mm	676-FCBGA		1.0mm	DB1-88RC9548
88SE9485 PCIe 2.0 x8 to 8 SAS/SATA 6Gb/s Ports RAID 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 RAID 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

SATA Port Multiplier/Multiplexer

Storage Switching

	Part Numbers	Port Count	Data Rate	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
88SM9715	88SM9715	6	SATA 6Gb/s	0.88W	10mm x 10mm	84-QFP		EV1-88SM9715
88SM9705	88SM9705	6	SATA 6Gb/s	0.88W	10mm x 10mm	84-QFP		EV1-88SM9705
88SM9713	88SM9713	4	SATA 6Gb/s	0.58W	8mm x 8mm	64-QFP		EV1-88SM9713
88SM9703	88SM9703	4	SATA 6Gb/s	0.58W	8mm x 8mm	64-QFP		EV1-88SM9703

SATA Port Multiplier/Multiplexer

Storage Switching

88SM4140

1:4 Serial ATA 3Gb/s Port Multiplier

88SM4021

2:1 Serial ATA Fail-Over Multiplexer

Part Numbers	Port Count	Data Rate	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
88SM4140	5	SATA 3Gb/s	1.67W	14mm x 14mm	80-LQFP		DB1-88SM4140C1-8087
88SM4021	3	SATA 1.5Gb/s	0.88W	9mm x 9mm	48-TQFP		DB-88SM4021

SATA Bridge

Storage Switching

88SA8052

SATA/PATA Bridge

Part Numbers	Port Count	Data Rate	Power	Package Size	Package Type	I-Temp	Evaluation Board Part Number
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

88SF9210

6Gb/s SAS to SATA Protocol Converter

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

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
88SF9110 6Gb/s SAS to SATA Protocol Converter	88SF9110	2	1	SAS/SATA 6.0 Gb/s	N/A	1.10W	10mm x 10mm	84-QFN		DB1-88SF9110
88SF9118 6Gb/s SAS to SATA Protocol Converter	88SF9118	2	1	SAS/SATA 6.0 Gb/s	N/A	1.25W	8mm x 11mm	117-TFBGA		DB1-88SF9118

Link Street® - Fast Ethernet Switches

SOHO Switching

	Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	QoS IEEE 802.1p Priority, 4 Queues per Port	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
88E6020 4-Port Fast Ethernet Switch	4	2 PHYs 2 MII/RMII	0.3W		DB1-88E6071-1		1K	64	9mm x 9mm	64-QFN	Yes: 1 PHY Port	Yes	Yes	Yes
88E6031 3-Port Fast Ethernet Switch	3	2 PHYs 1 MII or 1 PHY 2 MII	0.4W		DB-88E6061-1		1K	16	14mm x 20mm	128-QFP	Yes: 1 PHY Port	Yes		
88E6035 3-Port Fast Ethernet Switch	3	2 PHYs 1 MII or 1 PHY 2 MII	0.4W		DB-88E6065-1		1K	64	14mm x 20mm	128-QFP	Yes: 1 PHY Port	Yes	Yes	
88E6060 6-Port Fast Ethernet Switch	6	5 PHYs 1 MII or 4 PHYs 2 MII	0.7W	Yes	DB-88E6060-1		1K	0	14mm x 20mm	128-QFP	Yes: 2 PHY Ports			
88E6061/B 6-Port Fast Ethernet Switch	6	5 PHYs 1 MII or 4 PHYs 2 MII	0.7W	Yes	DB-88E6061-1		1K	16	14mm x 20mm	128-QFP	Yes: 2 PHY Ports	Yes		
88E6063 7-Port Fast Ethernet Switch	7	5 PHYs 2 MII	0.9W	Yes	DB-88E6063-1		2K	16	14mm x 20mm	128-QFP	Yes: 2 PHY Ports	Yes	Yes	
88E6065/B 6-Port Fast Ethernet Switch	6	5 PHYs 1 MII or 4 PHYs 2 MII	0.7W	Yes	DB-88E6065-1		1K	64	14mm x 20mm	128-QFP	Yes: 2 PHY Ports	Yes	Yes	
88E6070 5-Port Fast Ethernet Switch	5	5 PHYs	0.5W		DB1-88E6071-1		1K	64	9mm x 9mm	64-QFN	Yes: 1 PHY Port	Yes		Yes
88E6071 7-Port Fast Ethernet Switch	7	5 PHYs 2 RMII (or 1 MII/ RGMII)	0.5W		DB1-88E6071-1		1K	64	9mm x 9mm	64-QFN	Yes: 1 PHY Port	Yes	Yes	Yes
88E6083 10-Port Fast Ethernet Switch	10	8 PHYs 2 MII	1.4W	Yes	RD-88E6083-1		2K	16	24mm x 24mm	216-QFP	Yes: 8 PHY Ports	Yes	Yes	

Link Street® - Fast Ethernet Switches

SOHO Switching

88E6085
10-Port Fast Ethernet Switch

88E6220
4-Port Fast Ethernet Switch

88E6250
7-Port Fast Ethernet Switch

Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	QoS IEEE 802.1p Priority, 4 Queues per Port	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
10	8 PHYs 2 MII	1.2W	Yes	DB-88E6085-1		2K	64	20mm x 20mm	176-QFP		Yes	Yes	
4	2 PHYs 2 MII/RMII	0.3W		DB1-88E6250-1	Yes	1K	64	9mm x 9mm	64-QFN	Yes: 1 PHY Port	Yes	Yes	Yes
7	5 PHYs 2 RMII (or 1 MII/RGMII)	0.5W		DB1-88E6250-1	Yes	1K	64	9mm x 9mm	64-QFN	Yes: 1 PHY Port	Yes	Yes	Yes

Link Street® - Fast Gigabit Ethernet Switches

SOHO Switching

88E6045
4FE+2GE Ethernet Switch

88E6046
4FE+2GE Ethernet Switch

88E6092/95
8FE+3GE Ethernet Switch

Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	QoS IEEE 802.1p Priority, 4 Queues per Port	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
6	4 FE PHYs GMII/SGMII	1.0W		DB-88E6095-8F3GC		1K	64	20mm x 20mm	176-QFP		Yes	Yes	
6	4 FE PHYs GMII/RGMII/SGMII	1.0W	Yes	DB-88E6046-1		1K	64	20mm x 20mm	176-QFP		Yes	Yes	
11	8 FE PHYs GMII/SGMII	1.5W	88E6095 only	DB-88E6095-8F3GC		8K	256	20mm x 20mm	176-QFP		Yes	Yes	

Link Street® - Fast Gigabit Ethernet Switches

SOHO Switching

88E6095F
8FE+3GE Ethernet Switch

88E6096/97
8FE+3GE Ethernet Switch

88E6097F
8FE+3GE Ethernet Switch

88E6240
4FE + 3GE Ethernet Switch with EEE & Sync-E

Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/ IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	Priority 4 Queues per Port	QoS IEEE 802.1p	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
11	8 FE PHYs GMII/SGMII	1.5W	Yes	DB-88E6095-8F3GC		8K	256	24mm x 24mm	216-QFP	Yes: 8 PHY Ports	Yes	Yes		
11	8 FE PHYs GMII/RGMII/SGMII	1.5W	88E6097 only	DB-88E6097-8F3GC		8K	4096	20mm x 20mm	176-QFP			Yes	Yes	
11	8 FE PHYs GMII/RGMII/SGMII	1.5W	Yes	DB-88E6097-8F3GC		8K	4096	24mm x 24mm	216-QFP	Yes: 8 PHY Ports	Yes	Yes		
7	4 FE PHYs 1 GE PHY 1 SerDes 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	1.1W		DB1-88E6240-1	Yes	8K	4096	14mm x 14mm	128-QFP	Yes: SGMII port	Yes	Yes	Yes	Yes

Link Street® - Gigabit Ethernet Switches

SOHO Switching

88E6121
3-Port Gigabit Ethernet Switch

88E6122
6-Port Gigabit Ethernet Switch

Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/ IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	Priority 4 Queues per Port	QoS IEEE 802.1p	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
3	2 GE PHYs 1 GMII	1.5W	Yes	DB-88E6122-6G		1K	64	14mm x 20mm	128-QFP			Yes	Yes	
6	2 GE PHYs 3 SerDes 1 GMII	2.0W	Yes	DB-88E6122-6G		1K	64	14mm x 20mm	128-QFP	Yes: SGMII ports	Yes	Yes	Yes	

Link Street[®] - Gigabit Ethernet Switches

SOHO Switching

	Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	QoS IEEE 802.1p Priority, 4 Queues per Port	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
88E6131 8-Port Gigabit Ethernet Switch	8	3 GE PHYs 4 SerDes 1 GMII	2.7W	Yes	DB-88E6131-8G		1K	256	20mm x 20mm	144-QFP	Yes: SGMII ports	Yes	Yes	
88E6152/55 6-Port Gigabit Ethernet Switch	6	6 SerDes or 5 SerDes 1 GMII	1.2W		DB-88E6185-10G		8K	256	14mm x 20mm	128-QFP	Yes	Yes	Yes	
88E6161 6-Port Gigabit Ethernet Switch	6	5 GE PHYs 1 GMII/RGMII/SerDes or 4 GE PHYs 2 GMII/RGMII/SerDes	2.5W	Yes	DB-88E6161-1		1K	64	24mm x 24mm	216-QFP	Yes: SGMII ports	Yes	Yes	
88E6165 6-Port Gigabit Ethernet Switch	6	5 GE PHYs 1 GMII/RGMII/SerDes or 4 GE PHYs 2 GMII/RGMII/SerDes	2.5W	Yes	DB-88E6165-1		8K	4096	24mm x 24mm	216-QFP	Yes: SGMII ports	Yes	Yes	
88E6171R 7-Port Gigabit Ethernet Switch	7	5 GE PHYs 2 RGMII/MII	2.5W		DB1-88E6171R-1		1K	64	14mm x 14mm	128-QFP		Yes	Yes	
88E6171 7-Port Gigabit Ethernet Switch	7	5 GE PHYs 2 GMII/RGMII/MII	2.5W		DB1-88E6171R-1		1K	64	20mm x 20mm	176-QFP		Yes	Yes	
88E6172 7-Port Gigabit Ethernet Switch with EEE	7	5 GE PHYs 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	2.2W		DB1-88E6176-1		8K	4096	14mm x 14mm	128-QFP		Yes	Yes	Yes
88E6175R 7-Port Gigabit Ethernet Switch	7	5 GE PHYs 2 RGMII/MII	2.5W		DB1-88E6175R-1		8K	4096	14mm x 14mm	128-QFP		Yes	Yes	
88E6175 7-Port Gigabit Ethernet Switch	7	5 GE PHYs 2 GMII/RGMII/MII	2.5W		DB1-88E6175R-1		8K	4096	20mm x 20mm	176-QFP		Yes	Yes	

Link Street[®] - Gigabit Ethernet Switches

SOHO Switching

	Number of Ports	Port Configuration	Power	I-Temp	Evaluation Board Part Numbers	Audio Video Bridging/IEEE 1588	MAC Size	IEEE 802.1Q Dynamic VLANs Supported	Package Size	Package Type	100BASE-FX Support	QoS, IEEE 802.1p Priority, 4 Queues per port	SNMP, RMON Network Management Support	Energy Efficient Ethernet (EEE)
88E6176 7-Port Gigabit Ethernet Switch with EEE	7	5 GE PHYs 1 SerDes 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	2.2W	Yes	DB1-88E6176-1		8K	4096	14mm x 14mm	128-QFP	Yes: SGMII port	Yes	Yes	Yes
88E6182/85 10-Port Gigabit Ethernet Switch	10	10 SerDes or 9 SerDes 1 GMII	1.5W	88E6185 only	DB-88E6185-10G		8K	256	14mm x 20mm	128-QFP		Yes	Yes	
88E6350R 7-Port AVB Gigabit Ethernet Switch	7	5 GE PHYs 2 RGMII/MII	2.5W	Yes	DB1-88E6350R-1	Yes	1K	64	14mm x 14mm	128-QFP		Yes	Yes	
88E6350 7-Port AVB Gigabit Ethernet Switch	7	5 GE PHYs 2 GMII/RGMII/MII	2.5W		DB1-88E6350R-1	Yes	1K	64	20mm x 20mm	176-QFP		Yes	Yes	
88E6351 7-Port AVB Gigabit Ethernet Switch with Sync-E	7	5 GE PHYs 2 GMII/RGMII/MII	2.5W	Yes	DB1-88E6351-1	Yes	8K	4096	20mm x 20mm	176-QFP		Yes	Yes	
88E6352 7-Port AVB Gigabit Ethernet Switch with EEE & Sync-E	7	5 GE PHYs 1 SerDes 1 RGMII/MII/RMII 1 GMII/RGMII/MII/RMII	2.2W	Yes	DB1-88E6352-1	Yes	8K	4096	14mm x 14mm	128-QFP	Yes: SGMII port	Yes	Yes	Yes
88E6123	3	2 GE PHYs 1 GMII/RGMII/MII/SGMII	1.2W		DB-88E6123-1		1K	64	14mm x 20mm	128-QFP	Yes: SGMII port	Yes	Yes	

PRESTERA® DX

Switching

Part Numbers

Port Configuration

Type

Evaluation Boards

Number of Ports

Package Size

Package Type

I-Temp

DX Series

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
2/3DB-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
2/3DB-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
Presteria-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	
Presteria-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
Presteria-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
Presteria-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

CX Series Packet Processors								
	Part Numbers	Port Configuration	Type	Evaluation Boards	Number of Ports	Package Size	Package Type	I-Temp
Presteria-CX8248	98CX8248	48 RXAUI	L3	RD-CX-48XG	48	40mm x 40mm	HFCBGA	
Presteria-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

DISCOVERY VI

System Controllers

Discovery VI MV64660
PowerPC System Controllers

Part Numbers	CPU Interface	I/O Support	Memory	Device Support	On-Board SRAM	Frequency	Voltage	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Boards	Software
MV64660	PowerPC 60x and MPX	1 x 32-Bit, PCI-X 1 x 4 OR 4x1 PCIe, 3 x GbE (2 x SGMII), 2 x UART, 2 x USB, 1x SATA	DDR2 64/72-Bits 533MHz, Up to 16 GB	16-Bit, 166 MHz, 5 Chip Selects	N/A	240 MHz	1.2V Core, 1.8V 2.5V/ 3.3V I/O	35mm x 35mm	880-BGA	1.0mm		DB-64660A0-2 MPC7448, DB-64660A0-MPC7448, DB-64660A0-IBM750CL, DB-64660A0-IBM750FL, DB-64660A0-IBM750GL	U-Boot (1.1.4), VxWorks 5.5/6.3, Linux 2.6.x

DISCOVERY V

System Controllers

Discovery V MV64560
PowerPC System Controllers

Part Numbers	CPU Interface	I/O Support	Memory	Device Support	On-Board SRAM	Frequency	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Boards	Software
MV64560	PowerPC 60x and MPX	1 x 64-Bit PCI-X, 1 x 32-Bit PCI-X OR 1 x 4 PCIe, 3 x GbE (2 x SGMII), 2 x UART, 2 x USB	DDR/DDR2 64/72-Bits 400MHz, Up to 8 GB	16-Bit, 166 MHz, 5 Chip Selects	N/A	200 MHz	35mm x 35mm	840-BGA	1.0mm	Yes	DB-64560A0-IBM750GL, DB-64560A0-IBM750FL, DB-64560A0-2XMP7448, DB-64560A0-IBM750CXR, DB-64560A0-MPC7447A, DB-64560A0-MPC7448	U-Boot (1.1.4), VxWorks 5.5/6.3, Linux 2.6.x

DISCOVERY III

System Controllers

	Part Numbers	CPU Interface	I/O Support	Memory	Device Support	On-Board SRAM	Frequency	Package Size	Package Type	Ball Pitch	I-Temp	Evaluation Boards	Software
Discovery III MV64460 PowerPC System Controllers	MV64460	PowerPC	2 x 64-Bit PCI-X, 3 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	2 Mb	200 MHz	35mm x 35mm	844-BGA	1.0mm	Yes	DB-64460B1-IBM750GX-S, DB-64460B1-MPC7447A, DB-64460B1-MPC7448-S, DB-64460B1-2XMP7447 A-S	Low-Level VxWorks [®] and Linux Drivers, PMON/2000 (Opsycon), Reference BSP - Linux, VxWorks
Discovery III MV64461 PowerPC System Controllers	MV64461	PowerPC 60x and MPX	2 x 32-Bit PCI-X, 2 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	2 Mb	200 MHz	35mm x 35mm	844-BGA	1.0mm		Use Evaluation board for MV64460	VxWorks, Linux Drivers, PMON/2000 (Opsycon), Reference BSP - Linux, VxWorks
Discovery III MV64462 PowerPC System Controllers	MV64462	PowerPC 60x and MPX	1 x 64-Bit PCI-X, 1 x 32-Bit PCI-X, 1 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	N/A	200 MHz	35mm x 35mm	844-BGA	1.0mm		Use Evaluation board for MV64460	VxWorks, Linux Drivers, PMON/2000 (Opsycon), Reference BSP - Linux, VxWorks
Discovery III MV64440 MIPS System Controllers	MV64440	MIPS 64-Bit SysAD	2 x 32-Bit PCI-X, 2 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	2 Mb	200 MHz	35mm x 35mm	844-BGA	1.0mm		DB-64440B1-RM7000C	Low-Level VxWorks and Linux Drivers, Reference BSP - VxWorks
Discovery III MV64441 MIPS System Controllers	MV64441	MIPS 64-Bit SysAD	2 x 32-Bit PCI-X, 2 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	2 Mb	200 MHz	35mm x 35mm	844-BGA	1.0mm		Use Evaluation board for MV64440	Low-Level VxWorks and Linux Drivers, Reference BSP - VxWorks
Discovery III MV64442 MIPS System Controllers	MV64442	MIPS 64-Bit SysAD	1 x 64-Bit PCI-X, 1 x 32-Bit PCI-X, 1 x GbE, 2 x MPSC	DDR 400 MHz, Up to 8 GB	32-Bit, 133 MHz, 5 Chip Selects	N/A	200 MHz	35mm x 35mm	844-BGA	1.0mm		Use Evaluation board for MV64440	Low-Level VxWorks and Linux Drivers, Reference BSP - VxWorks

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

Number of Ports
10/100/1000BASE-T
100BASE-FX
100BASE-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

Single-Port Devices

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 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 Yes Yes Yes Yes Yes R Yes 64-QFN

Alaska 88E1113
Fiber Transceiver

1 Yes Yes Yes Yes Yes Yes Yes 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 Yes Yes Yes Yes Yes Yes R Yes 64-QFN

Alaska 88E1116R
10/100/1000BASE-T PHY with RGMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes R Yes 64-QFN

Alaska 88E1118R
10/100/1000BASE-T PHY with RGMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes R Yes 64-QFN

Alaska 88E1119R
10/100/1000BASE-T PHY with GMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes G Yes 72-QFN

Alaska 88E1310
10/100/1000BASE-T PHY with RGMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes G Yes 48-QFN

Alaska 88E1318
10/100/1000BASE-T PHY with RGMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes G Yes 48-QFN

Alaska 88E1310S
10/100/1000BASE-T PHY with RGMII

1 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes G Yes 48-QFN

*RoHS 6/6 + Halogen-Free

ALASKA® Series

Transceivers

Alaska 88E1318S

10/100/1000BASE-T PHY with RGMII

Alaska 88E1510

EEE 10/100/1000BASE-T PHY with RGMII

Alaska 88E1512

EEE 10/100/1000BASE-T PHY with RGMII, SGMII, Copper/Fiber Autoterminal Detect

Alaska 88E1518

EEE 10/100/1000BASE-T PHY with RGMII

Dual-Port Devices

Alaska 88E1121R

10/100/1000BASE-T PHY with RGMII

Alaska 88E1322

10/100/1000BASE-T PHY with SGMII, SyncE, IEEE 1588 Time Stamping, Copper/Fiber Autoterminal Detect

Quad-Port Devices

Alaska 88E1143

100/1000Mbps Fiber Transceiver

Alaska 88E1145

10/100/1000BASE-T PHY with SGMII /SERDES

Alaska 88E1240

10/100/1000BASE-T PHY with SGMII

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																									
	1	Yes						Yes							LDO	Yes	Yes	Yes		Yes			G	Yes	48-QFN
	1	Yes						Yes							Switching Regulator	Yes	Yes	Yes		Yes	Yes	Yes	G	Yes	48-QFN
	1	Yes	Yes	Yes	Yes	Yes		Yes	Yes						Switching Regulator	Yes	Yes	Yes		Yes	Yes	Yes	G	Yes	56-QFN
	1	Yes						Yes							Switching Regulator	Yes	Yes	Yes		Yes		Yes	G	Yes	48-QFN
	2	Yes						Yes								Yes	Yes	Yes	Yes				R	Yes	100-TQFP
588	2	Yes	Yes	Yes	Yes				Yes							Yes	Yes	Yes	Yes	Yes	Yes		G	Yes	196 TFBGA
	4		Yes	Yes	Yes			Yes	Yes								Yes	Yes	Yes		Yes		R	Yes	364-PBGA
	4	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes		Yes		R	Yes	364-HSBGA
	4	Yes	Yes	Yes						Yes							Yes	Yes	Yes				R	Yes	Multiple Packages

*RoHS 6/6 + Halogen-Free

ALASKA® Series

Transceivers

Alaska 88E1340

10/100/1000BASE-T PHY with SGMII, QSGMII, Copper/
Fiber Autotmedia Detect, SyncE, IEEE 1588 Time-
stamping

Alaska 88E1340S

10/100/1000BASE-T PHY with SGMII, QSGMII, Copper/
Fiber Autotmedia Detect, SyncE, IEEE 1588 Time-
stamping

Alaska 88E1543

EEE 10/100/1000BASE-T PHY with SGMII

Alaska 88E1545

EEE 10/100/1000BASE-T PHY with QSGMII

Number of Ports	10/100/1000BASE-T	100BASE-FX	1000BASE-X	SGMII (Line)	SFP	MI	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
4	Yes	Yes	Yes	Yes	Yes	Yes				Yes				Yes		Yes	Yes	Yes	Yes			G	Yes	196-TFBGA
4	Yes	Yes	Yes	Yes	Yes	Yes				Yes				Yes		Yes	Yes	Yes	Yes		Yes	G	Yes	196-TFBGA
4	Yes	Yes	Yes	Yes						Yes						Yes	Yes	Yes	Yes		Yes	G	Yes	128-LQFP
4	Yes				Yes								Yes			Yes	Yes	Yes	Yes		Yes	G	Yes	128-LQFP

*RoHS 6/6 + Halogen-Free

ALASKA® X Series

Transceivers

Single-Port Devices

Alaska X 88X2010

XAU1 to XFI Serial 10G SERDES (LAN PHY)

Alaska X 88X2011

XAU1 to XFI Serial 10G SERDES (WAN & LAN PHY)

Number of Ports	10GBASE-SR/ER/LR										10GBASE-SW/EW/LW										100Mb/1Gb/10GBASE-T										XAU1										XGMII										RXAU1										XFI										SFI										XENPAK										X2										XFP										SFP/SFP										TwinaX										CR										Programmable LED										JTAG										Reference Clock										I-Temp										RoHS 6/6, Green*										Production										Package Type																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

*RoHS 6/6 + Halogen-Free

ALASKA® X Series

Transceivers

Alaska X 88X2012

XAUI to XFI Serial 10G SERDES (LAN PHY)

Alaska X 88X2013

XAUI to XFI Serial 10G SERDES (WAN & LAN PHY)

XGXS Devices

Alaska X 88X2040

10GE XAUI and 4 Channel 3.125 Gigabit per second SERDES

Alaska X 88X2080

Dual XAUI to XGMII SERDES

	Features																							
	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	
	1	Yes						Yes						Yes				Yes	Yes	156.25/159.375 MHz		Yes	Yes	256-TFBGA
	1	Yes	Yes					Yes						Yes				Yes	Yes	156.25/159.375 MHz, 155.52 MHz (WIS)		Yes	Yes	256-TFBGA
	1						Yes	Yes				Yes	Yes					Yes	Yes	62.5/125/156.25/159.375 MHz		Yes	Yes	256-TFBGA
	2						Yes	Yes				Yes	Yes					Yes	Yes	62.5/125/156.25/159.375 MHz		Yes	Yes	448-PBGA

*RoHS 6/6 + Halogen-Free

KYOTO Series

Video Processors and Hybrid Demodulators

	Part Number	Input Ports	Output Ports	OSD Support	Embedded CPU	Memory Interface	External FLASH	Voltage	Package Size	Package Type	I-Temp	Ball Pitch	Ordering Part #
QDEO™ Video Processors													
88DE2710 Adaptive Digital Video Format Converter with Qdeo®; Video Processing	88DE2710	3	2	External	None	32bit DDR1 @ 200Mhz	Not Required	1.2V Core, 3.3V/2.5V I/O	19mm x 19mm	324-BGA		1.0mm	88DE2710-A1-BCY1C000
88DE2750 Adaptive Digital Video Format Converter with Qdeo®; Video Processing	88DE2750	1	1	External	None	'-2' 16bit DDR2 @ 200Mhz, '-4' 16bit DDR2 @ 400Mhz	Not Required	1.0V core, 3.3V/1.8V I/O	17mm x 17mm	256-BGA		1.0mm	88DE2750-B0-BIF2C200 (200MHz), 88DE2750-B0-BIF2C000 (400MHz)
88DE2755 Adaptive Digital Video Format Converter SOC with Qdeo®; Video Processing. Integrated v1.4 HDMI Rx and Tx, with 3D support.	88DE2755	2	1	Internal and External	PJ1 ARM v5TE-compliant Marvell Processor Core @400Mhz with 16KB IRAM and 16KB Data RAM	'-2' 16bit DDR2 @ 200Mhz, '-4' 16bit DDR2 @ 400Mhz, 16/8 bit DDR3 @ 800Mhz	Supports SPI and Nand for onchip s/w execution	1.0V core, 3.3V/1.8V I/O	17mm x 17mm	256-BGA		1.0mm	88DE2755B0-BIF2C000, 88DE2755B1-BIF2C000, 88DE2755B1-BIF2C000-T182, 88DE2755B1-BIF2C000-T183, 88DE2755B1-BIF2C000-T188

BALI Series

Video Processors and Hybrid Demodulators

	Part Number	Input Ports	Output Ports	OSD Support	Embedded CPU	Memory Interface	External FLASH	Voltage	Package Size	Package Type	I-Temp	Ball Pitch	Ordering Part Numbers
Hybrid Demodulator													
88DE8020 Single Chip Hybrid Demodulator for DVB-T/C/NTSC/PAL/SECAM	88DE8020	1	1	Not Applicable	None	Not Required	Not Required		7mm x 7mm	48-QFN			88DE8020XX-NNB2C000
88DE8010 Single Chip Hybrid Demodulator for DVB-T/C/NTSC/PAL/SECAM	88DE8010	1	1	Not Applicable	None	Not Required	Not Required		7mm x 7mm	48-QFN			88DE8010-XX-NNB2C000
88DE8500 Single Chip Hybrid Tuner for Worldwide markets	88DE8500	1	1	Not Applicable	None	Not Required	Not Required		5mm x 5mm	32-QFN			88DE8500-A7-NAJ2C000

Wireless

Wireless

88W8786

Single-Chip 1x1 802.11n/b/g

88W8366

3x3 802.11 a/b/g/n

88W8063

3x3 802.11 a/b/g/n

Part Number	Wireless Technologies Support	Interface Support	Package Type	Package Size	Ball Pitch	Embedded CPU	Temp	Evaluation Boards	Process
88W8786	802.11 b/g/n	SDIO 2.0, USB 2.0	QFN	8mm x 8mm	400um	Yes	0 to +70C	RD-88W-USB-8786-A1	65nm
88W8366	802.11 a/b/g/n	PCIe 1.1	BGA		500um	Yes	0 to +70C	CD-88W-AP95-A0	90nm
88W8063	802.11 a/b/g/n	PCIe 1.1	BGA		650um	Yes	0 to +70C	CD-88W-AP95-A0	90nm

AVASTAR™ Series

Wireless

AVASTAR 8700 Family

88W8764

Single Chip 4x4 802.11 a/b/g/n

88W8782

Single Chip 1x1 802.11 a/b/g/n

88W8787

Single-Chip 1x1 802.11 a/b/g/n + BT 3.0 + HS + FM Tx/Rx

88W8790

Single chip BT 3.0 + HS + FM Tx/Rx

Part Number	Wireless Technologies Support	Interface Support	Package Type	Package Size	Ball Pitch	Embedded CPU	Temp	Evaluation Boards	Process
88W8764	802.11 a/b/g/n	PCIe 1.1	TFBGA	12mm x 12mm	650um	Yes	0 to +70C	RD-88W-AP-8764DR1-R0	55nm
88W8782	802.11 a/b/g/n	SDIO 2.0, USB 2.0	QFN	8mm x 8mm	400um	Yes	0 to +70C	RD-88W-USB-8782-R0 RD-88W-SD-8782-R0	55nm
88W8787	802.11 a/b/g/n 1x1 + BT 3.0 + HS + FM Rx	SDIO 2.0, UART	TFBGA, CSP	7mm x 7mm & Chip-scale	500um, 260um	Yes	-30 to +85C	RD-88W-USB-8787-GI-A2, RD-88W-SD-8787-AGI-A2	55nm
88W8790	BT 3.0 + HS + FM Rx	SDIO 2.0, GSPI, UART	TFBGA, CSP	4mm x 4mm	400um	Yes	-30 to +85C	RD-88W-8790-A0	55nm

AVASTAR™ Series

Wireless

	Part Number	Wireless Technologies	Interface Support	Package Type	Package Size	Ball Pitch	Embedded CPU	Temp	Evaluation Boards	Process
88W8766 Single-Chip 1x1 802.11 a/b/g/n + BT 4.0 Dual-mode	88W8766	802.11 a/b/g/n 1x1 + BT 4.0 Dual-mode	PCIe 1.1, USB 2.0	QFN	8mm x 8mm	400um	Yes	0 to +70C	RD-88W-HMC-8766SB2A-R0, RD-88W-HMC-8766DB2A-R0	55nm
88W8797 Single-Chip 2x2 802.11 a/b/g/n + BT 4.0 Dual-mode + FM Tx/Rx	88W8797	802.11 a/b/g/n 2x2 + BT 4.0 Dual-mode + FM Rx	SDIO 3.0, USB 2.0, HSIC, UART	TFBGA, CSP	9mm x 7.5mm & Chip-scale	400um, 260um	Yes	-30 to +85C	RD-88W-8797-AG1-R0	55nm
AVASTAR 8800 Family										
88W8897	88W8897	802.11 a/b/g/n/ac 2x2 + BT 4.0 Dual-mode + NFC	PCIe, SDIO 3.0, USB 2.0, HSIC, UART	QFN, CSP	9.5mm x 11mm	400um	Yes	-30 to +85C		40nm
88W8864	88W8864	802.11 a/b/g/n/ac 4x4	PCIe, SDIO 3.0, USB 2.0, HSIC, UART	AQFN	11.8mm x 11mm	400um	Yes	0 to +70C		40nm

Marvell

A NEXT GENERATION SEMICONDUCTOR COMPANY

Founded in 1995, Marvell Technology Group Ltd. has operations worldwide and approximately 5,700 employees. Marvell's U.S. operating subsidiary is based in Santa Clara, California and Marvell has international design centers located in the U.S., Europe, Israel, Singapore and China. A leading fabless semiconductor company, Marvell ships over one billion chips a year. Marvell's 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 today's 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.

STORAGE SOLUTIONS: Marvell is the market leader in data storage silicon solutions spanning consumer, mobile, desktop and enterprise market segments. The company's storage solutions enable customers to engineer high-volume products for hard disk drives, tape drives, optical disks, and solid state drives, as well as host adapters and bridges.

NETWORKING: Marvell networking products are designed for the utmost reliability and resiliency. From robust enterprise networking applications to consumer and small business solutions Marvell's networking products seamlessly power every point in the networking ecosystem and ensure that it just works.

CONSUMER SOLUTIONS: From industry-leading storage, networking, wireless and mobile technologies, to award-winning video processing products, Marvell's solutions power some of today's most cutting-edge consumer devices. Combined with a history of innovations in microprocessor architecture that have enabled high integration and scalability, Marvell technology empowers consumers to manage and consume content at home or on the go, without compromising performance.

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. With our digital Power Factor Correction (PFC) controllers, Marvell is using its power management expertise to take the lead in energy-efficient technology for AC/DC power supplies and low power LED and CFL lighting solutions.

Advantage

Marvell products come with complete reference designs, which include board layout designs, software, manufacturing diagnostic tools, documentation and other items, to assist customers with product evaluation and production. Marvell collaborates closely with customers to develop and deliver new leading-edge products for quick time-to-market. Marvell uses world-class semiconductor foundry and packaging services to reliably deliver high-volume and low-cost total solutions. For more information, visit our web site at www.marvell.com.

KEY FACTS

Founded: 1995

Stock Symbol: MRVL (NASDAQ)

Chairman, President and Chief Executive Officer: Dr. Sehat Sutardja

Worldwide Employment:
Approximately 5,700

Net Revenues: \$3.61 billion (fiscal 2011, ended January 31, 2011)

Marvell Technology Group Ltd. Canon's Court, 22 Victoria Street Hamilton HM 12, Bermuda

Marvell US Headquarters:

Marvell Semiconductor, Inc. 5488 Marvell Lane Santa Clara, CA 95054
Phone: 408-222-2500

Marvell Asia Headquarters:

Marvell Asia Pte, Ltd. No. 8 Tai Seng Link Singapore 534158 Phone: (65) 6756-1600

Marvell European Headquarters:

Marvell Switzerland Sarl Route de Pallatex 17 CH-1163 Etoy Switzerland

www.marvell.com