



Marvell ARMADA

SOM A388

Dual Core SoM (System-On-Module)
Rev 2.0



Simple. Robust. Computing Solutions

SolidRun Ltd.

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Overview

Embedded system product developers, device makers and OEMs can now drastically shorten their development cycle and complexity with SolidRun's Micro-System on a Module (SOM™) family. The ARMADA SOM is the perfect building block for a fast and efficient system, and especially optimized for IoT systems.

ARMADA A388 Highlighted Features

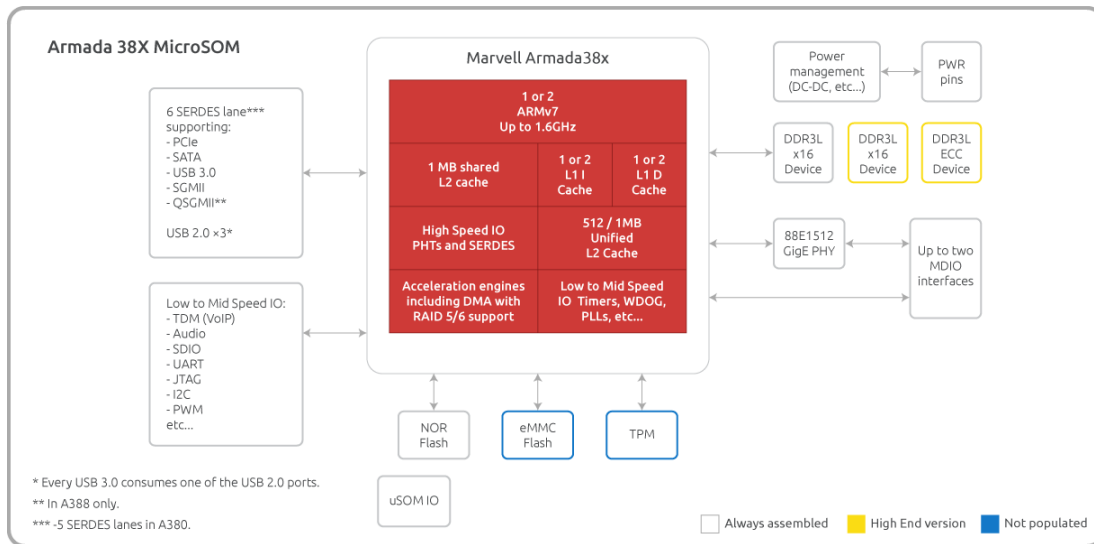
- ✿ Based on Marvell's ARMADA A388 SoC
- ✿ Up to 2GB DDR3L (Default size 1GB)
- ✿ Small size 50mm×35mm
- ✿ Variety of temperature grades:
 - Commercial 0°C...60°C
 - Industrial -40°C...85°C
- ✿ Long longevity of 10 years
- ✿ Optimal for networking and storage applications
- ✿ Broad SW support

System Specifications

ARMADA A388	
System On Chip	Marvell ARMADA 388 (88F6828)
Processor core	Dual core ARM Cortex A9
Processor speed	Up to 1.6GHz in commercial grade Up to 1.3GHz in industrial grade
Floating Point	✓
SIMD	NEON
L1 Cache	32KB per core
L2 Cache	1MB shared
Memory Type	32 bit DDR3L
ECC	Optional
Memory Capacity	1GB (up to 2GB)
SPI Flash	Optional
eMMC	Optional (8GB)
10/100/1000 Mbps MAC	3 ports
On uSOM GE PHY	1
SDIO	✓
I2S / SPDIF / TDM	✓
USB 2.0	3
RTC Support (battery on carrier)	✓
GPIO pins	✓
Power Managements Signaling	Optional
JTAG	✓
Total MUXED SERDES **	6
SATA	4xGen III
PCIe 2.0 x1	4xGen II
USB 3.0 (Requires USB 2.0 port too)	2
QSGMII	1xQSGMII (3 MACs)
OS Support	U-boot Linux Kernel 3.x and 4.x OpenWrt Yocto
Temperature Range	Commercial/Industrial
Supply Voltage	3.3V-5V
I/O Voltage	3.3V, 1.8V
SOM Interface	Hirose DF40 connectors 1.5mm, 3mm mating height
Dimensions (WxL)	35mmx50mm

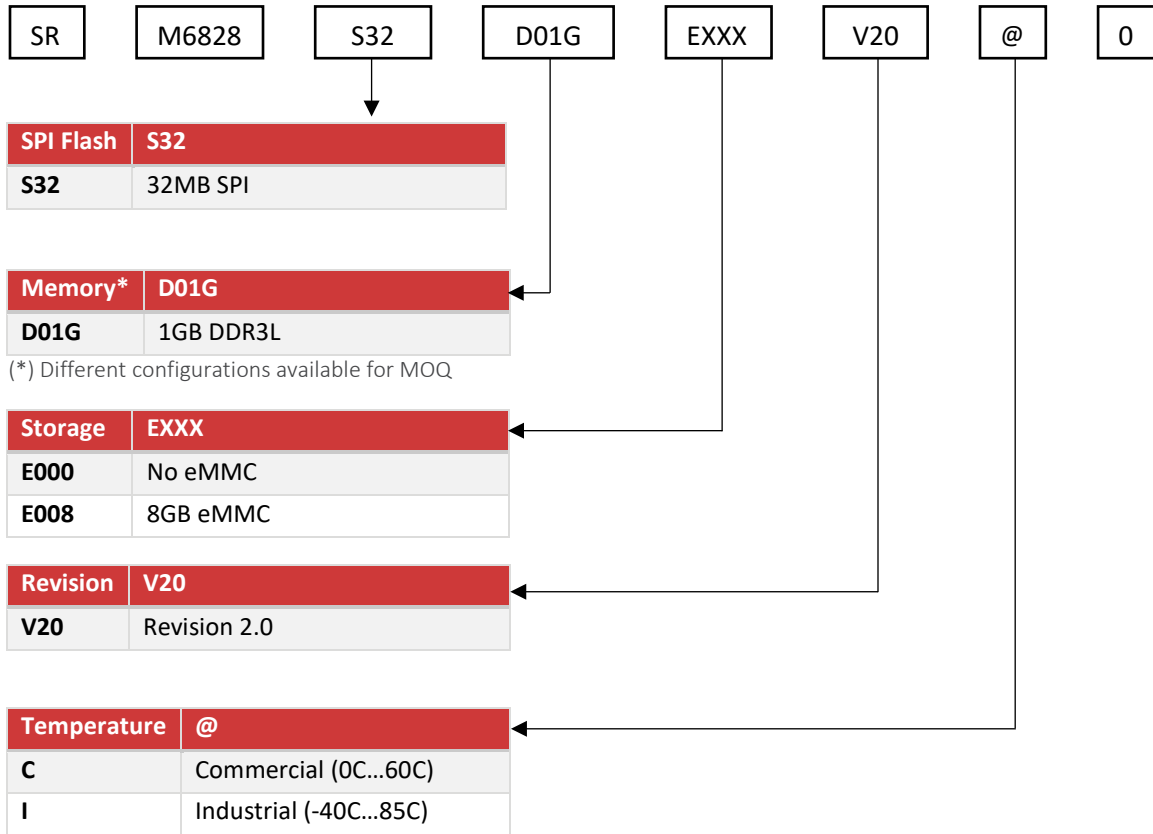
(*) Refer to the SR-Armada-uSOM-Reference-Manual for complete table.

Block Diagram



Ordering Information

SKU Format



Available SKUs for SOM A388

SKU	Description
SRM6828S32D01GE000V20C0	A388 32MB SPI 1GB DDR No eMMC Com. Temp R2.0
SRM6828S32D01GE008V20C0	A388 32MB SPI 1GB DDR 8GB eMMC Com. Temp R2.0
SRM6828S32D01GE000V20I0	A388 32MB SPI 1GB DDR No eMMC Ind. Temp R2.0
SRM6828S32D01GE008V20I0	A388 32MB SPI 1GB DDR 8GB eMMC Ind. Temp R2.0

Available Accessories and Development Boards

SKU	Description
HS00007	SOM Heatsink
SRCFCPE000CV21	ClearFog Pro Com. Temp R2.1
SRCFCBE000CV12	ClearFog Base Com. Temp R1.2
SRCFCPE000IV21	ClearFog Pro Ind. Temp R2.1
SRCFCBE000IV12	ClearFog Base Ind. Temp R1.2

Safety Notice

- This device is to be used with Certified Power adaptor with output rated 12VDC, 1.5A. Power adapter must meet Limited power source (LPS) requirements.
- Power adapter must meet local safety standards and requirements based on product intended use.
- Power adapter must meet Operating environment conditions as specified above.

Disposal

Follow local regulations regarding disposal of the product. Dispose of your product in accordance with local regulations. In some areas, the disposal of these items in household or business trash may be prohibited.

Help us protect the environment- recycle!

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Support

For technical support please visit:

Our Wiki – <http://wiki.solid-run.com/>

Our Forums - <http://forum.solid-run.com/>

For direct support please contact us at: support@solid-run.com

Documentation

Additional documentation available at:

<http://wiki.solid-run.com/doku.php?id=products:a38x:documents>