

# MACCHIATObin Single Shot Datasheet

Marvell ARMADA A8040™ based development board



SolidRun Ltd.



### Overview

The Marvell MACCHIATObin is a first-of-its-kind Cost-Effective and High-Performance networking community development board targeting OpenDataPlane (ODP), OpenFastPath (OFP) and ARM network functions virtualization (NFV) ecosystem communities.

With a software offering that include a fully open source ODP implementation, U-Boot 2015.x, mainline U-Boot, UEFI EDK2, Linux LTS kernel 4.4.x, mainline Linux, Yocto 2.1 and netmap, the Marvell MACCHIATObin is an optimal platform that community developers and Independent Software Vendors (ISVs) can use for development around ODP and OFP and for delivering ARM based VNFs.

# MACCHIATObin Single Shot Highlighted Features

- Based on Marvell's A8040 Quad Core
- Arm Cortex A72 processor (up to 1.6Ghz)
- Up to 16GB DDR4
- Dual 10GbE SFP
- 3 x SATA 3.0 connectors
- Feature rich









# **System Specifications**

Memory and Storage  Up to 16GB DDR4 DIMM 3 x SATA 3.0 MicroSD eMMC  2 x 10GbE SFP 1 x 2.5GbE SFP 1 x 1GbE RJ45  Connectivity  PCIe x4 gen 3.0 (open slot) USB 2.0 header (internal) USB 3.0 connector  UART header JTAG header TDM header MicroUSB for debug (UART over USB)  Power  12V input via DC jack / ATX type power connector  Oftware  Mainline Linux   Linux Kernel 4.4.x	MACCHIATObin Single Shot			
3 x SATA 3.0 MicroSD eMMC  letwork  2 x 10GbE SFP 1 x 2.5GbE SFP 1 x 1GbE RJ45  PCIe x4 gen 3.0 (open slot) USB 2.0 header (internal) USB 3.0 connector  /O  UART header JTAG header TDM header MicroUSB for debug (UART over USB)  lower  12V input via DC jack / ATX type power connector  Mainline Linux   Linux Kernel 4.4.x	Processor	Marvell A8040 Arm Cortex A72 quad-core	(1.6GHz)	
1 x 2.5GbE SFP 1 x 1GbE RJ45  PCIe x4 gen 3.0 (open slot) USB 2.0 header (internal) USB 3.0 connector  VO  UART header JTAG header TDM header MicroUSB for debug (UART over USB)  12V input via DC jack / ATX type power connector  Mainline Linux   Linux Kernel 4.4.x	Memory and Storage	3 x SATA 3.0 MicroSD		
USB 2.0 header (internal) USB 3.0 connector  UART header JTAG header TDM header MicroUSB for debug (UART over USB)  12V input via DC jack / ATX type power connector  Mainline Linux   Linux Kernel 4.4.x	Network	1 x 2.5GbE SFP		
JTAG header TDM header MicroUSB for debug (UART over USB)  12V input via DC jack / ATX type power connector  Oftware Mainline Linux   Linux Kernel 4.4.x	Connectivity	USB 2.0 header (internal)		
oftware Mainline Linux   Linux Kernel 4.4.x	1/0	JTAG header TDM header		
	Power			
UEFI (Linaro UEFI tree)   Yocto 2.1 SUSE Linux netmap   DPDK OpenDataPlane (ODP)   OpenFastPath	Software	Mainline U-Boot   U-Boot 2015.11 UEFI (Linaro UEFI tree)   Yocto 2.1 SUSE Linux netmap   DPDK		
Ambient temp. (commercial):  Enclosed ambient temp. (commercial):  CPU die temp. (commercial):  Ambient temp. (industrial):  Enclosed Ambient temp. (industrial):  CPU die temp. (industrial):	Environment	Enclosed ambient temp. (commercial): CPU die temp. (commercial): Ambient temp. (industrial): Enclosed Ambient temp. (industrial): CPU die temp. (industrial):	0°C to 40°C 0°C to 105°C -40°C to 85°C -40°C to 55°C	
Dimensions (WxL) 170mm x 170mm (Mini ITX)	Dimensions (WxL)	170mm x 170mm (Mini ITX)		
inclosure Optional metal enclosure	Enclosure	, ,		

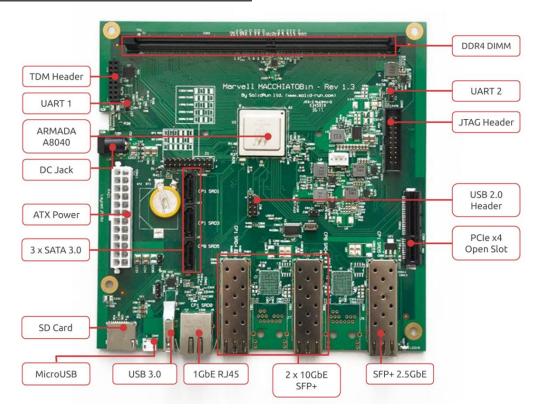
# Available SKUs for MACCHIATObin Single Shot

SKU	Description	
SRM8040S00D04GE008S00CH	MACCHIATObin Single Shot 4GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink	
SRM8040S00D16GE008S00CH	MACCHIATObin Single Shot 16GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink	

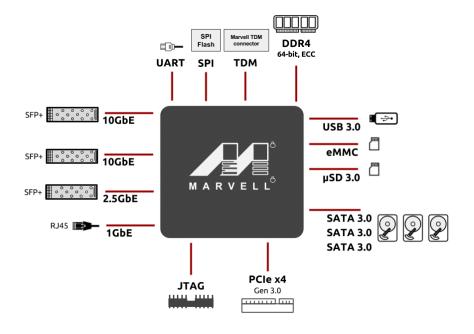
<sup>(\*)</sup> Different configurations available for MOQ



# MACCHIATObin Single Shot Layout



# MACCHIATObin Single Shot Diagram





# **Safety Notice**

- a. 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.
- b. Power adapter must meet local safety standards and requirements based on product intended use.
- c. 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!

# <u>IMPORTANT NOTICE – Please Read Carefully</u>

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# Support

For technical support please visit:

Developer center – https://developer.solid-run.com/

For direct support please contact us at: <a href="mailto:support@solid-run.com">support@solid-run.com</a>

# Documentation

Additional documentation available at:

https://developer.solid-run.com/products/macchiatobin-single-double-shot/