

SBC Arm® Architecture

miriac® SBC-S32V234

The miriac® SBC-S32V234 Single Board Computer based on the NXP® S32V234 Arm® Vehicle Network Processors family for compute intensive image processing applications.



Highlights



- MIPI CSI, the most widely used camera interface in the mobile industry
- up to dual 1 GB 32-bit ECC DDR3L RAM
- HDMI Display interface
- Safety: FCCU and FCCU output supervision unit
- Video encoder/decoder: H.264, 8/10/12-bit / H.264, 8/10/12-bit, JPEG, 8/12-bit, up to 4 streams





Product Description

The miriac® SBC-S32V234 single board computer is a perfect embedded platform for environment recognition and detection. The system is an excellent means for rapid prototyping purposes or might be applied even for production use.



Features

· Gattarios	
CPU	
Architecture:	Arm® Cortex®-A53
Processor:	NXP® S32V234 CPU: Quad Arm® Cortex®-A53 cores at up to 1.3 GHz core frequency
	1x Cortex®-M4 Core for real time processing
DRAM:	Up to dual 1 GB 32-bit ECC DDR3L RAM
Memory	
Flash Card:	Yes
Boot Flash:	eMMC or external SD card. dual boot mode dipswitch
eMMC:	16 GB
Graphic	
HDMI Interface:	1x
Camera Input:	2x MIPI-CSI camera interface connector, 2x 5 V/12 V supply
Ethernet	
1GbE:	1x
High Speed IO	
μUSB:	1x
Operating Condition	
Power Supply Voltage:	Single +12 V DC power input (+9 to +15 V)
RTC:	Yes
RTC-Buffer:	Supercap
Temperature:	0 °C to 70 °C
Mechanical	
Dimensions:	126 mm x 93 mm
Software / Additional	
Additional:	- Four user LEDs
	- Four system state LEDs
	- Reset switch
	- Polarity & overvoltage protection,
	- On/Off power switch

www.microsys.de 2 | 5

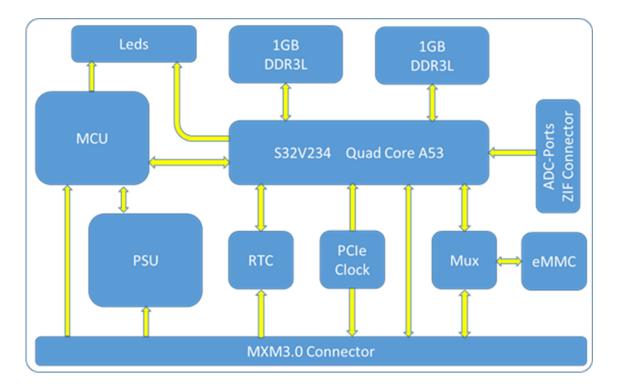
- 2x 5 V/12 V fan connectors

General Note:

Our standard product versions offer what we consider to be the optimum configuration in terms of performance, price, usage and TDP. The product features lists specify the maximum range of functions per interface. However, not all interfaces or functions are always available in parallel. Flexible SERDES multiplexing is one of the reasons for this. In addition, we provide multiple memory expansion options and are also happy to accommodate specific customer wishes. So do not hesitate to contact us directly to discuss your desired configuration.

www.microsys.de 3 | 5

Block Diagrams



miriac® SBC-S32V2

www.microsys.de 4 | 5



Name	Code	Description	Status
miriac® MPX-S32V234	854901	with NXP® S32V234@1 GHz CPU, up to 2x 1 GB DDR3L RAM	active
miriac® SBC-S32V234A Development System	855710	includes order# 854901 (MPX-S32V234 SoM with NXP® S32V234@1 GHz CPU, up to 2x 1 GB DDR3L RAM) Carrier Board, accessories	active



Related Products

Name	Description	Image
miriac® MPX-S32V234	Vision and safety processor for compute intensive image processing applications	





Mühlweg 1 82054 Sauerlach Germany Sales: +49 8104 801-130 E-Mail: info@microsys.de www.microsys.de