

# PSMRC-M310T

SMARC module based on TI-AM3354 single-core processor



PSMRC-M310T is design as CPU module series with SMARC form factor. It is based on embedded TI™ AM3354 Single-core processor, an ARM® Cortex®-A8 processor. Best cost-effective entry model to replace original markets of ARM9 and ARM11.

The SMARC ("Smart Mobility ARChitecture"), small form factor of lower power, cost concern, and high performance, is used as building blocks for portable and stationary embedded systems. The SMARC pin-out is optimized for the features common to ARM CPUs and not common to the x86 PC world. The modular approach allows scalability, fast time to market and upgradability while still maintaining cost, performance, low power and small physical size.

## FEATURES

- Ultra low power consumption: < 2W
- Longevity support more than 10 years
- Higher C/P ratio
- Support SMARC 1.0
- Built-in H/W Graphics accelerators, Open GL ES1.1 & 2.0, Open VG and OpenMax supported
- Portwell ARM ECO system to save customers' development time to market.

## GENERAL

Processor	TI AM3354 Cortex A8 single core processor
PMIC	TI TPS65910A3
Memory	512MB onboard DDR3
Storage	- 1 x onboard micro SD socket - 1 x SDIO interface to golden finger
USB	- 1 x 4 port USB hub - 1 x USB OTG interface to golden finger - 3 x USB 2.0 host interface to golden finger
UART	- 1 x UART on obard pin header for debug port - 3 x UART signal to golden finger (two 2-wire, one 4-wire)
Ethernet	1 x Gigabit Ethernet signal to golden finger
Audio	- I2S Interface golden finger - SPDIF to golden finger
Expansion Interface	- 4 x I2C interface to golden finger - 1 x SPI interface to golden finger - 4 x GPIO interface to golden finger - 1 x JTAG onboard pin header (optional)
Power Requirement	+5VDC ±5% From MXM edge connector DC 5V from golden finger, reserve one pin header on module for 5V input
Dimension	82mm(L) x 50mm(W)
Environment	- Operation Temperature: 0~60 °C, R.H. 5%-95% - Storage Temperature: -20~80 °C, R.H. 5%-95%
CAN BUS	2 x CAN bus signal to golden finger

## DISPLAY

Display Interface	TTL signal to golden finger
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## ORDERING GUIDE

AB1-XXXXZ	PSMRC-M310T CPU Module board
AB9-XXXXZ	PSMRC-C300ARM, I/O carrier board