SMARC

AVNET EMBEDDED

MSC SM2-SK-QCS6490-EP1

SMARC 2.0 Starterkit for Qualcomm QCS6490/ QCS5430 based Modules

170 x 170 mm

TDP depending on SMARC module

0°C +60°C

SMARC module

Description

The SMARC 2.0 Starterkit for SMARC modules with Qualcomm QCS6490/QCS5430 Series processors is based on a Mini-ITX SMARC 2.0 carrier board MSC SM2-MB-EP1 and contains all necessary products to quickly enable the user to run and evaluate the Qualcomm QCS6490/ QCS5430 module range. The kit does not contain a SMARC module in order to give the user greater flexibility as to which particular module version and CPU speed variant is desired.

As part of the SMARC 2.0 Starterkit, the appropriate Heatsink/Heatspreader and a Flash SD Card with USB Reader will be supplied. A bootable Linux installation can be downloaded from the MSC Support website and uploaded via USB downloader tool into the UFS flash (which is part of the SMARC module). A power supply with cable kit is also included for convenience.

Direct screen output on a PC monitor is possible using the on-board DisplayPort output. As an option to the Starter Kit several suitable LCD kits of various resolutions and sizes are available upon request.

Highlights

- SMARC 2.0 carrier board in Mini-ITX format with socket for SMARC 2.0/2.1.1/2.2 modules
- Heatspreader suitable for all module variants of the Qualcomm QCS6490/QCS5430 module family
- 12V power supply and cable kit included for immediate operation of the Starterkit
- Bootable Linux installation on Support Website, can be stored in SD Card (supplied with Card Reader)
- DP graphics output
- LVDS graphics output on standard 30-pin connector; backlight connector includes adjustable backlight voltage and dimming
- Ethernet (10/100/1000 LAN) connector
- 4x USB 2.0 Host, USB Host/Client, UART, SD-Card socket
- Getting Started manual
- Optional TFT kits available

Technical Data - MSC SM2-SK-QCS6490-EP1

Technology	Kit with Carrier
Formfactor	Mini-ITX
CPU	Qualcomm QCS6490/QCS5430
Chipset	Qualcomm QPS 615
USB	2x USB 3.0 host port 2x USB 2.0 host port 1x USB 2.0 Debug port (MicroUSB) 1x USB 2.0 on Mini PCI Express slot
Serial Interfaces	1x RS232 (UART0) on DB9 connector with 2-wire hand shake 1x RS232 (UART1) on pin header w/o hand shake
Bus Interfaces	PCI Express lanes from module can be connect to either 1x PCI Express x4 Gen.2 slot or 1x Mini PCI Express x1 Card slot 1x CAN 2.0B on DB9 connector 1x CAN 2.0B on pin header 1x eSPI connector SPI, SMBus, I2C, and GPIO on pin header
Display Interfaces	DisplayPort connector 40-pin eDP connector LVDS on Jili30 connector with EEPROM for display data and backlight connector MIPI CSI-2 camera interface on 15pin FFC connector
Network Interface	2x 10/100/1000BASE-T Ethernet on RJ45 connector
Audio Interface	I2S Audio codec, routed to three audio jacks
Miscellaneous	4-pin fan connector, PWM controlled by module Socket for CR2032 type RTC battery (3V) Serial EEPROM for board data Serial EEPROM for LVDS display data SPI Boot Flash, socket Power and Reset button Configuration via switches/jumper
Feature Highlights	SMARC™ 2.0 carrier board for full and short size modules Support of listed carrier board features and interfaces depends on used module
OS Support	Yocto Linux Windows 11 IOT Android (on request) Ubuntu (on request)
Power Requirement	12V Power supply contained in Starterkit

Environment	Temperature Range: 0°C … +60°C operating -20°C … +85°C storage Humidity: 5 … 90% (operating, non condensing) 5 … 90% (storage, non-condensing)
Dimensions	170 x 170 mm
Certificates	UL / CE
Carrier	MINI-ITX

Order Reference - MSC SM2-SK-QCS6490-EP1

Order Number	Description	Reference	Cat*
114394	SMARC 2.0 Starterkit for Qualcomm QCS6490/QCS5430 based Modules. Includes MSC SM2-MB-EP1 Baseboard, Heatspreader/Heatsink, SD Card with USB Card Reader, Power Supply and suitable cable kit. The StarterKit does not include the Qualcomm QCS6490/QCS5430 module. Please order your choice of module separately.	MSC SM2-SK-QCS6490-EP1-KIT001 BRDFTX	PV

*COM products are divided in two categories, „PV“ (preferred variant) and „OR“ (on request).

Published: September 18, 2024 - 13:15:58

Avnet Embedded GmbH
Industriestr. 16
76297 Stutensee

AvnetEmbedded@avnet.com
avnet.com/embedded