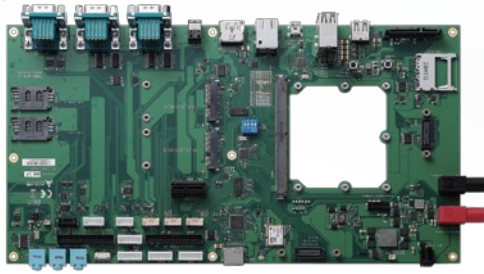


NEW



Features

- For SMARC form factor modules
- GPS u-blox NEO-6 module and G Sensor
- Supports keypad (TI TCA8418) and touchscreen (TSC204061PW)
- Wi-Fi & Bluetooth USB dongle
- USB hub
- RGB to HDMI

Specifications

Display Interfaces

24 bit parallel RGB LCD data and control signals
 Single channel LVDS 18 or 24 bit (derived from parallel RGB data)
 - Panel support signals (I²C, power enable, PWM)
 - 2nd LVDS output may be implemented on carrier board
 - Support for dual channel implementations
 Future migration to eDP defined by pin-sharing with LVDS
 HDMI/DP port

Camera Interfaces

Serial configuration: CSI (2 lane) + CSI (2 or 4 lane)
 Parallel configuration: Parallel 10, 12, 16 bit or dual 8 bit input motion video or still images

SDIO Interfaces

4 bit SDIO card interface with support lines
 8 bit eMMC interface with support lines
 - Off-module boot from eMMC (optional)

SPI Interfaces

2x SPI interfaces
 - Off module boot use (optional)
 - G sensor ADXL345 BCCZ

I²S Interfaces

3x I²S interfaces
 - Audio codec TLV320AIC23BPW
 - Line-in, Line-out, Mic
 - Optional with HDA

I²C Interface

4x I²C
 - Power Management
 - General Purpose
 - Camera
 - LVDS Display ID

Asynchronous Serial Port Interfaces

4x asynchronous serial ports
 - Two with 2 wire handshake (RXD, TXD, RTS#, CTS#)
 - Two with data only (RXD, TXD)
 - Logic level interface

CAN Bus Interfaces

2x CAN bus interfaces
 - Logic level signals from Module based CAN bus protocol controllers
 - RXD, TXD only

USB Interfaces

2x ports
 - One with USB 2.0 OTG
 - Two with USB 2.0 host operation (Full Speed and High Speed)

PCI Express

Three PCIe x1 links
 PCIe Gen1 or Gen 2 (module dependent)
 Reference clock pair for each PCIe link
 Full set of PCIe support signals for each link
 May be configured as PCIe target if module chipset allows
 Common PCIe wake signal

SATA Interface

One SATA with power interface

Gigabit Ethernet

RJ-45 10/100/1000 (by LAN transformer)
 One analog GBE MDI interface

SPDIF Interfaces

SPDIF out for audio

Boot Source Select

Module SPI/eMMC/NOR/NAND
 Carrier SPI/eMMC/SD Card/SATA
 DIP Switch (4)

GPIO

12 pins header (including fan control and HDA reset)

Alternate Function Blocks (AFB)

Standard Module: AFB pins are reserved
 MOST Bus AFB
 Dual GBE AFB
 FieldBus AFB

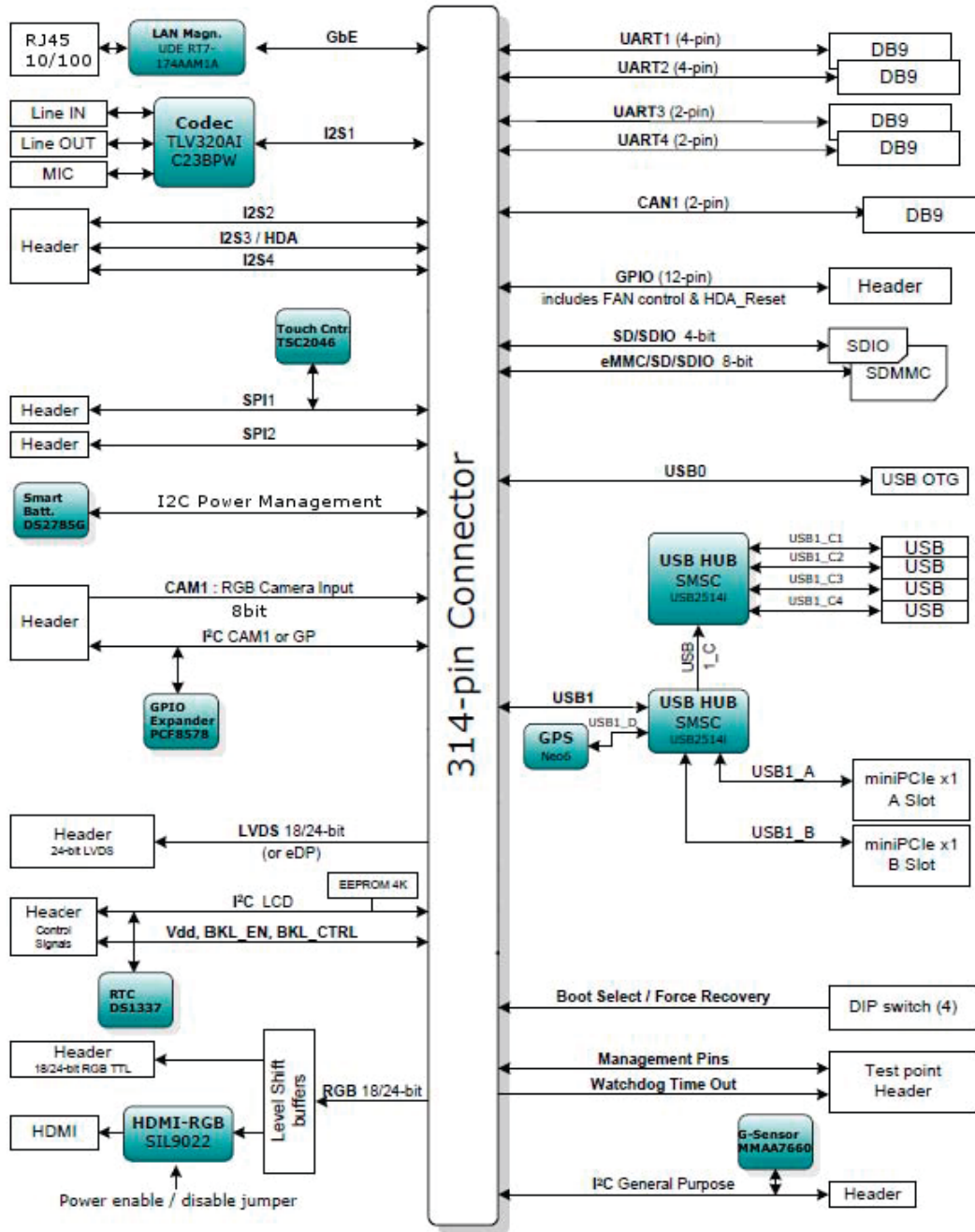
Dimensions

330 mm x 175 mm (L x W)

Board connector

MXM3 314 pins

Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
LEC-BASE	SMARC, Baseboard for LEC-3517 module, MXM 314 pins, 330 mm x175 mm