

Features

- TI Sitara AM3517 Cortex-A8 Processor
- Robust, vibration resistant 314 pin MXM connector
- LCD display, serial and parallel camera input
- 720p, Multiple I²C, I²S and serial ports
- USB client/host mode operation
- Extreme Rugged™ operating temperature: -40°C to +85°C



SMARC * LEC = Low Energy Computer-on-Module

Specifications

Core System

CPU TI Sitara AM3517 Cortex-A8 600MHz
NEON™ SIMD co-processor and vector floating point co-processor
PowerVR™ SGX530 graphics accelerator

Memory 256 MB DDR2 SDRAM (166MHz 16/32-bit mDDR/DDR2 Interface)
512MB NAND flash

Video

CPU Video Processing Front End (VPFE) 16-bit
Camera-in (8-bit)
Supports YCbCr 4:2:2 format (8/16-bit with discrete horizontal and vertical sync)

Display

Programmable display sizes: XGA, WXGA, SXGA+, 720p
24-bit RGB, color and monochrome displays up to 2048 x 2048 x 24bpp

Audio

Interface 3x I²S, audio codec on carrier board

Media

Interface 1x USB Host; 1x USB Host/OTG
SD/MMC 8-bit, SDIO 4-bit

Ethernet

Chipset SMSC LAN8710A-EZK PHY
Interface 10/100 BASE-T Ethernet controller

I/O Interfaces

GPIO SPI 2x
I²C 3x
UART 2x 4-pin and 2x 2-pin
1x CAN bus

Timer

12x 32-bit general purpose timers
3x 32-bit watchdog timer
1x 32-bit 32-kHz sync timer

Power

Power PMIC TPS650732

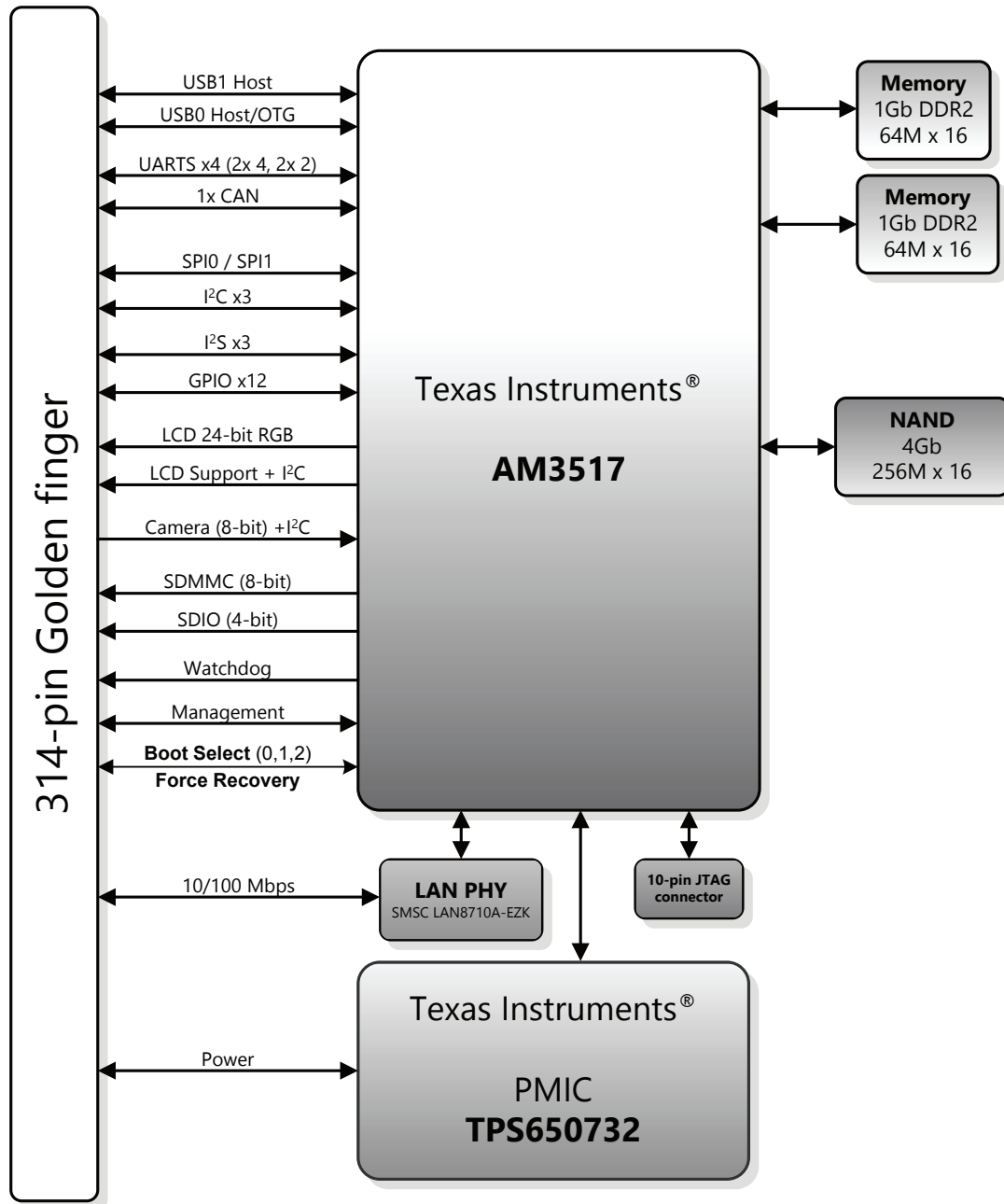
Mechanical and Environmental

Form Factor SMARC Specification v1.0
Dimensions SMARC short size module, 82 mm x 50 mm
Operating Temperature Extreme Rugged™: -40°C to +85°C
Board Connector MXM 314 pins

Operating Systems

Standard Support Linux, Windows CE

Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
LEC-3517	SMARC Short Size Module with TI Sitara AM3517 Cortex-A8 600MHz, 256MB DDR2 SDRAM, 512MB NAND Flash, 82mm x 50mm
LEC-3517-HS	Heatsink for LEC-3517