

X15 Single Board Computer

102110288

Product Overview

08/26/2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

Seeed Studio X15 Single Board Computer is a member of the BeagleBoard family that measures 4" x 4.2". This board features a core tailored for every computing task. The X15 board offers a high-speed interface for every connectivity need and to give algorithms room to stretch.

The X15 board features 2x ARM Cortex-M4 Microcontrollers (MCUs), 2D/3D Graphics and Video Accelerators (GPUs), and 4GB 8-bit eMMC on-board flash storage. This board is compatible with Debian, Android, and Ubuntu software.



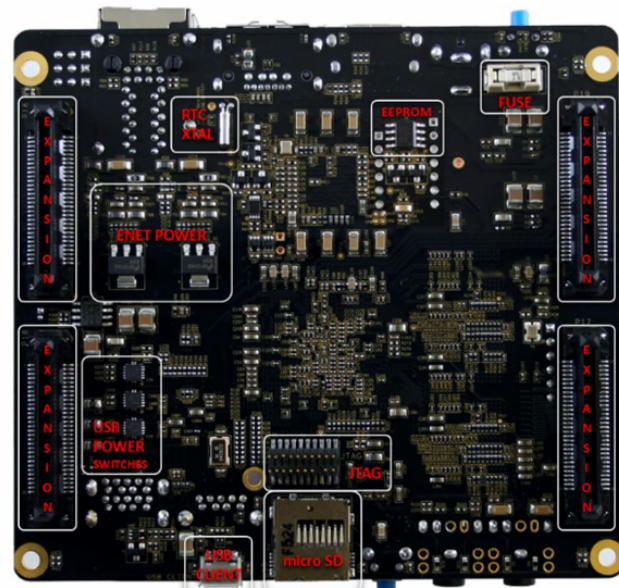
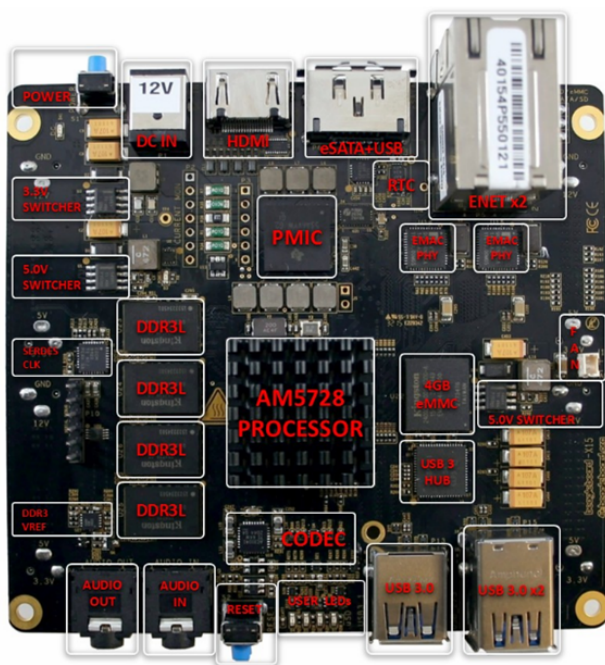
Features

- Processor:
 - TI AM5728 2x1.5GHz ARM® Cortex-A15
- 2GB DDR3 RAM
- 4GB 8-bit eMMC on-board flash storage
- 2D/3D Graphics and Video Accelerators
- 2x 700MHz C66 Digital Signal Processors (DSPs)
- 2x ARM Cortex-M4 Microcontrollers
- 4x 32-bit Programmable Real-time Units (PRUs)
- Software compatibility:
 - Debian
 - Android
 - Ubuntu
 - Cloud9 IDE on Node.js
- Connectivity:
 - 2x Gigabit Ethernet
 - 3x super speed USB 3.0 host
 - High-speed USB 2.0 client
 - eSATA (500mA)
 - Full-size HDMI video output
 - microSD card slot
 - Stereo audio in and out
 - 4x60-pin headers with PCIe, LCD, and mSATA

Specifications

BeagleBoard-X15	
Processor	Dual ARM Cortex-A15 @ 1.5GHz, Sitara AM5728
Graphics	Dual Core SGX544 3D, 532MHZ
DSP	Dual C66x, 700MHZ
Video Accelerator	IVA, 532MHZ
Graphics	GC3230 2D BTBLT
GP ARM Cores	DUAL ARM M4, 212MHZ
SDRAM	2GB DDR3L, Dual 32bit bus, Non-ECC 533MHZ
Onboard Flash	4GB, 8bit Embedded eMMC
PMIC	PS659037
Debug Support	20-pin CTI JTAG, Serial debug header
PCB	4.2" x 4", 12 layers
Indicators	(2) Power, (4) Ethernet, (4) User Controllable
HS USB 3.0 Host	(2) Type A 900ma (1) 1800mA (1)
USB 2.0 Host	(4) 500mA
USB 2.0 Client	(1) micro USB Type B
Ethernet	(2) 10/100/1000 RJ45
SATA	(1) eSATA Connector- Powered 500mA
LCD Ports	(2) Via Expansion
PCIe	(2) Channels via expansion
Camera Ports	(1) Via expansion
SD	(1) microSD
User Input	(1) Reset Button (1) Power Button
HDMI	(1) Full Size connector, 24b 1920x1080 60FPS, EDID
Audio	HDMI and AIC3104 (Stereo In/Out)
Expansion	(4) 60 pin dual row headers
GPIO pins	157
UARTs	7
SPI/I2C/CAN	1/1/1
PRU Pins	185
Real Time Clock	8pin RTC with optional battery backup, I2C I/F
Current Taps	(4) 5V, 3.3V, VDD_MPU, VDD_DSP, VDD_CORE
Weight	TBD
Power	12VDC@TBD

Board Overview



Mouser Part Number

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To learn more, visit <https://www.mouser.com/new/seeed-studio/seeed-studio-beagleboard-x15/>