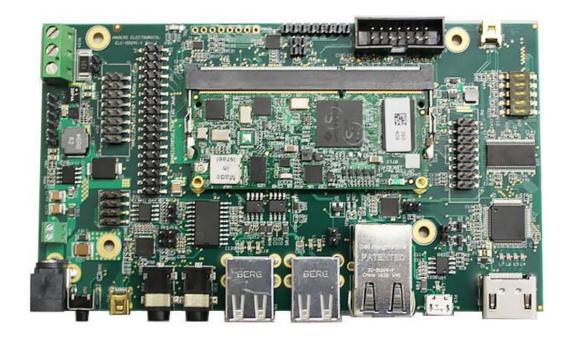# Single Board Computer

DX1B-T335

Datasheet Version 1

The **DX1B-TI AM335X** is an ultra low cost single board PC based on the Texas Instruments Cortex A8 Sitara AM3352/AM3354 CPU. It is implemented with a CM-T335 computer on module providing most of the functions and a ELC-00241-1 carrier board. A wide range of high speed interfaces provides extensive connectivity.

The ELC-00241-1 has low-power consumption and supports Linux OS. The rich feature set of the ELC-00241-1 is customisable according to the price / performance needs of the target application.

Create the Vision, Display the Future

System & Graphics

CPU	Texas Instruments AM3354, 300 / 600MHz 32KB (L1) + 256KB (L2) cache
Graphics	PowerVR SGX530 GPU providing 2D / 3D graphics acceleration with OpenGL-ES and OpenVG support
Memory	Up to 512MB Mobile DDR3-1066. 16 bit
Storage	On board NAND flash disk, Up to 1GB
RTC	Real time clock operated from on-board rechargeable lithium battery
Operating System	Linux (Debian)

I/Os

Serial Port	Up to 2 x RS232 ports, RX/TX only, RS-232 levels, up to 3.6864 Mbps, Ultra mini-serial connector
RS485	Up to 1 x RS485 port
Displays	DVI-D, up to 1366x768, HDMI connector LVDS interface, up to 1366x768, 100-mil header Parallel RGB, up to 1366x768, FPC connector
Ethernet	1000 BaseT Ethernet port. Implemented with the CM-T335 GbE controller. RJ-45 connector and activity LEDs. (Optional)
WiFi	WiFi 802.11b/g/n implemented with TI WL1271 chipset (Optional)
USB	Up to 1 OTG USB2.0 high-speed port, Up to 480 Mbps, micro-USB connector Up to 4 host USB2.0 high-speed ports, Up to 480 Mbps, USB type-A connector
GPIO	Up to 8 lines, 100-mil header
CAN	Up to 1 CAN bus interface with isolator and driver, 100-mil header
SDIO	Micro-SD socket
I2C	Up to 2 x I2C interfaces (up to 400Kbps)
SPI	Up to 1 configurable SPI bus interfaces (Slave/Master modes)
Sound I/O	Analogue stereo output, Audio line-in 3.5mm jacks.
PWM	1 x PWM available

Electrical, Mechanical and Environmental Specifications

Power Input	12V DC
Power Consumption	1.5 – 5.0 W depending on configuration and CPU frequency
Operating Temperature	0°C to 60°C

Block Diagram