

A Complete IoT Gateway Connecting Your Mission Critical Sensor Data to Cloud Applications



Environment

Healthcare

Asset Tracking

Retail

Metering

Industrial Control

Embedded CPU System

- ▶ TI AM3352 ARM Cortex-A8 processor up to 1GHz
- ▶ Dynamic power scaling
- ▶ 4GB eMMC FLASH
- ▶ 512MB DDR3 RAM
- ▶ Debian Linux (Default), Android, RTOS

Sensor Interfaces

- ▶ Standard BeagleBone cape expansion header
- ▶ Serial RS232/RS485/ModBus
- ▶ CANBus, I2C, SPI
- ▶ Digital GPIOs
- ▶ 2x USB2.0 HS Host ports
- ▶ Up to 7x ADC inputs

LAN Connectivity

- ▶ 10/100M Ethernet LAN

Satellite Positioning and Timing

- ▶ Integrated GNSS receiver

Cellular WAN Connectivity

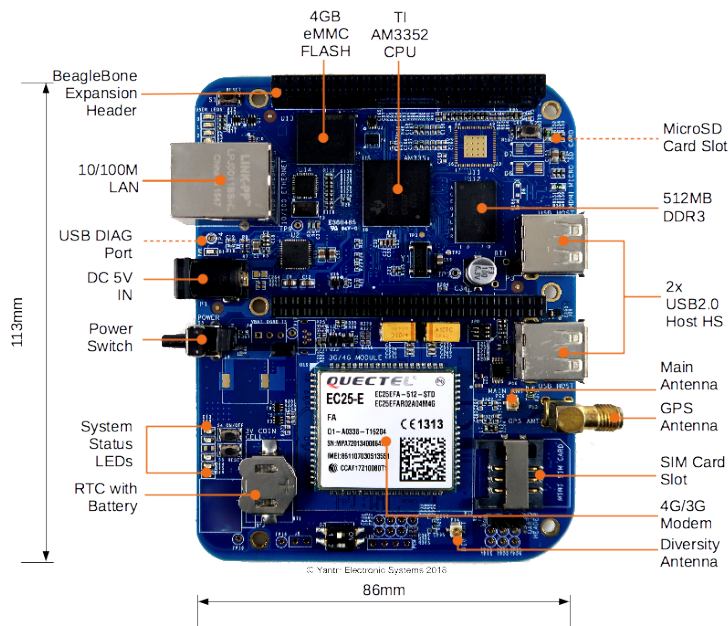
- ▶ Integrated Cellular Modem
 - Worldwide 4G/LTE (up to CAT4) and 3G/HSPA+ modem options with region-wise approvals
 - Up to 150/50 Mbps DL/UL speed
- ▶ Push - Pull mini SIM socket

Cloud Analytics Integration

- ▶ Yantrr Device Cloud
- ▶ Microsoft Azure
- ▶ Telit deviceWISE

Operating Conditions

- ▶ 5V/4A DC supply with optional Li-Po re-chargeable battery backup
- ▶ Available extended industrial temperature range
- ▶ Available industrial IP66 class enclosure



System Specifications

CPU SYSTEM					
Processor	TI Sitara™ ARM® Cortex®-A8 AM3352 (up to 1GHz), On-Chip 64KB Shared SRAM, 32KB Data Cache, 32KB L1 Cache, On-Chip 256 KB L2 Cache				
SDRAM Memory	512MB DDR3L 800MHz				
Flash Storage	4GB, 8 bit Embedded MMC				
Real Time Clock	+/- 2ppm accuracy, Automatic calendar compensated up to year 2100, battery backed, +/- 3°C accurate temperature sensor output				
Debug Support	CPU console connection through USB device port				
Power source	5V, 4A DC Jack (Battery-backed option available)				
Indicators	1-Board power, 1-Modem Power, 1-Modem Data, 1-GPS, 1-GPS Fix, 4- User programmable LEDs				
USB	2x USB2.0 host ports, Type A socket, 500mA LS/FS/HS				
LAN	10/100M, shielded RJ45				
User Input Buttons	Reset, Boot, Power, Modem Reset, Modem On/Off, GPS Reset				
I/O Interfaces	2x SPI, 2x I2C, 5x UART, 2x CANBus 7xAin (1.8V max), McASP0, GPIOs (69 max), MMC1, MMC2, LCD 24 bit, GPMC				
Video Interface	Micro HDMI (optional)				
Compatibility	Compatible with other BeagleBone industrial capes such as CANBus, RS232, RS485 and most of the LCD capes				
GNSS System					
Connector	SMA (F)				
Receiver	Qualcomm® IZat™ location technology Gen8C Lite (GPS, GLONASS, BeiDou, Galileo and QZSS)				
Cellular Modem Options					
Model (Region)	3GUC20-G (Worldwide)	4GEC25-E (EMEA, Korea, Thailand)	4GEC25-A (North America GSM)	4GEC25-V (Verizon)	4GEC25-AUT, 4GEC25-AU (Australia, New Zealand)
Network	GSM/GPRS/EDGE/WCDMA/HSPA+		4G/LTE (Fallback to GSM/3G wherever available)		
Bands	UMTS: 800/850/900/1900/2100 MHz GSM: 850/900/1800/1900MHz	GSM: B3/B8, WCDMA: B1/B5/B8, FDD-LTE: B1/B3/B5/B7/B8/B20, TDD LTE: B38/B40/B41	WCDMA: B2/B4/B5, FDD-LTE: B2/B4/B12	FDD LTE: B4/B13	(AUT) WCDMA: B1/B5, FDD-LTE: B1/B3/B5/B7/B28 (AU) GSM: B2/B3/B5/B8, WCDMA: B1/ B2/ B5/ B8, FDD-LTE: B1/ B2/ B3/ B4/ B5/ B7/ B8/ B28, TDD LTE: B40
Max Data Rate (DL/UL) Mbps	14.4/5.76		150/50		
Software Interface	PPP, AT command set, USSD, SMS				
SIM Card	Mini SIM				
Antenna	Main and Diversity u.FL sockets				
Modular Approvals	ANATEL/ AT&T/ CE/ FCC/ IC/ JATE/ NBTC/ PTCRB/ RCM/ Rogers/ TELEC	CE/ GCF/ KC/ SKT/ NBTC/ Vodafone/ FAC	FCC/ PTCRB/ IC/ Rogers/ AT&T	FCC/GCF/Verizon	RCM/ NCC/ Anatel



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