



Operational Intelligence in the Palm of Your Hand Securely Connect Remote Sensors to IoT Cloud Platforms

Powerful ARM Cortex-A8 CPU • 4GB+ FLASH • 512MB RAM • 4G/LTE • GPS • Wi-Fi • BT4.0/BLE



Environment

Healthcare

Asset Tracking

Retail

Metering

Industrial Control

Application Processor (BeagleBone compatible)

- ▶ TI Sitara™ ARM® Cortex®-A8 AM335x, up to 1GHz, 2000MIPS with 512 MB RAM, 4GB eMMC FLASH
- ▶ Supports UART/I2C/SPI/SDIO/CAN interfaces for sensor & machine data
- ▶ Additional MicroSD storage
- ▶ Optional HDMI video
- ▶ 10/100M Ethernet
- ▶ Ships with Debian ARMHF OS
- ▶ Size 162mmX44mmX92mm (WxHxD)

Note: Pictures of the product are representative and may change.

Enhanced for M2M

- ▶ Multi-port USB hub with 3x USB-A host connectors for connecting additional USB devices
- ▶ I2C external sensor connectivity
- ▶ High precision battery-backed RTC
- ▶ USB diagnostic port to connect to CPU and modem
- ▶ Optional battery backed standby mode

Cellular WAN Connectivity

- ▶ Integrated Cellular Modem Options
 - PTCRB certified LTE CAT4/CAT3/CAT1 NA (AT&T, T-Mobile, Rogers, Bell) bands, EU/Asia bands
 - Verizon certified LTE CAT4/CAT3/CAT1
 - Global bands HSPA+/3G/2G modem (Up to 21/5.76 Mbps DL/UL data rates)
- ▶ Push - Push micro SIM socket

GPS

- ▶ Integrated GPS/GNSS receiver with external antenna

Wireless LAN Connectivity

- ▶ Integrated WiFi 802.11 b/g/n
- ▶ Integrated Bluetooth 4.0 / BLE

Cloud Analytics Integration

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

Specifications

ARCA-V2 CPU System	
Processor	TI Sitara™ ARM® Cortex®-A8 AM335x (up to 1GHz options), On-Chip 64KB Shared SRAM, 32KB Data Cache, 32KB L1 Cache, On-Chip 256 KB L2 Cache
SDRAM Memory	512MB DDR3
Flash Storage	On-board 4GB, 8 bit Embedded MMC External microSD expansion slot
Real Time Clock	+/- 2ppm accuracy, Automatic calendar compensated up to year 2100, battery backed, +/- 3°C accurate temperature sensor output
Debug Support	USB Device diagnostic port connects to CPU console and modem
Power source	5V, 4A DC
Indicators	1-Board power, 1-Modem Power, 1-Modem Data, 1-GPS, 1-GPS Fix, 1-Diag, 4- User programmable LEDs
HS USB2.0 USB	3x USB2.0 HS host ports, Type A socket, 500mA per port
Serial Port	Console UART access through diagnostic USB device port
Ethernet	10/100Mbps, RJ45
User Input Buttons	Power
I/O Interfaces	I2C, USB
Video Interface (Optional)	Micro HDMI
Compatibility	Compatible with other Industrial capes such as CANBus, RS232, RS485 and most of the LCD capes
Compliance	FCC Part 15 Subpart B Class B, ICES-003 Issue 6 Class B (models offered in North America)

Cellular Modem Options							
Modem	ARCA-V207A (NA)	ARCA-V207B	ARCA-V206A (NA)	ARCA-V206B	ARCA-V207D (NA)	ARCA-V207E	ARCA-V208A
Parameter	ARCA-V207C (EU)		ARCA-V206C (EU)		ARCA-V207F (EU)		
Network Type	LTE CAT1	LTE CAT1 Verizon	LTE CAT3	LTE CAT3 Verizon	LTE CAT4	LTE CAT4 Verizon	Global GSM/WCDMA
Frequency Bands	B2/B4/B5/B12/B13 (NA) B1/B3/B7/B8/B20 (EU)	B2/B4/B13	B17/B5/B4/B2 (NA) B20/B3/B7 (EU)	B13/B4	B2/B4/B5/B17 (NA) B1/B3/B7/B8/B2 (EU)	B2/B4/B13	800/850, 900, AWS, 1700, 1900, 2100
Data Rate (DL/UL) Mbps	10/5	10/5	100/50	100/50	150/50	150/50	21/5.76
Certifications	FCC, IC, PTCRB, CE, GCF	FCC, IC, Verizon	FCC, IC, PTCRB, CE, GCF	FCC, IC, Verizon	FCC, IC, PTCRB, GCF	FCC, IC, Verizon	FCC, IC
Embedded GPS/GNSS			•	•			•
Ant. Diversity	•	•	•	•	•	•	•

GPS/GNSS (ARCA-V206A, ARCA-V206B, ARCA-V208A)	
Receiver	16 channels L1 1575.42 MHz (GPS) 1598.0625 – 1607.0625 (GLONASS)
Acquisition Sensitivity	-161 dBm (Hot start), -145 dBm (Cold Start), -165 dBm (Indoor with A-GPS), -159 dBm (Navigation)
Time To First Fix	Hot start 1.8s, Cold start 31.5s
Accuracy	Position 0.4m
Position Update Rate	1 Hz
NMEA Output Messages	NMEA 0183 format
Miscellaneous	Supercap backup for hot start

Wireless LAN Option	
Wi-Fi	802.11 b/g/n, Wi-Fi Direct, AP/EP modes, up to 150Mbps
Bluetooth	V2.1+EDR/BT v3.0/BT v4.0, 1/2/3 Mbps

Note: Features and specifications are subject to change



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