

## FEATURES

- TI AM335x Application Processor
  - Up to 1GHz ARM Cortex A8 MPU
  - NEON SIMD Coprocessor
  - 32 KB L1 Program Cache
  - 32 KB L1 Data Cache
  - 256 KB L2 Cache
  - 64 KB RAM
  - 176 KB boot ROM
  - JTAG Emulation/Debug
- AM335x Processor Choices
  - AM3359 (PRUs, 3D graphics and EtherCat)
  - AM3358 (PRUs and 3D graphics)
  - AM3357 (PRUs and EtherCat)
  - AM3356 (PRUs)
  - AM3354 (3D graphics)
  - AM3352
- Up To 1 GB DDR3
- Up to 1 GB Parallel NAND FLASH
- 8 MB Serial NOR FLASH (optional)
- Integrated TiWi-BLE Module
  - o IEEE 820.11 b/g/n
  - o Bluetooth 2.1 + EDR
  - o Low Energy 4.0
  - o External Antenna Connector (U.FL)
- Integrated Power Management
- SGX530 3D Graphics Accelerator – Processor Dependent
- Watchdog Timer
- Real-time clock
- Power Reset and Clock Management (PRCM)
- Crypto Hardware Accelerators (AES, SHA, PKA, RNG)



## STANDARD DDR3 SO-DIMM-204 INTERFACE

- 2 10/100/1000 Mbps EMACs
- 18-bit WXGA LCD Interface
- Resistive Touch Screen Controller
- 8 Channel, 12-bit SAR ADC
- 2 CAN Interfaces
- 5 UARTs
- 2 USB Ports
- 2 4-Channel McASPs
- 2 MMC/SD/SDIO
- 2 SPI, 3 I2C, GPIO
- eHRPWM, eQEP
- Single 3.3V to 5.0V Input Power Supply

## APPLICATIONS

- Embedded Instrumentation
- Industrial Automation
- Industrial Instrumentation
- Medical Instrumentation
- Weighing Scales
- Closed Loop Motor Control
- Home Automation

## BENEFITS

- Rapid Development / Deployment
- Multiple Connectivity and Interface Options
- Rich User Interfaces
- High System Integration
- High Level OS Support
  - Linux Kernel
  - QNX
  - Windows CE Ready

## DESCRIPTION

The MitySOM-335x WiFi/BLE series of highly configurable, small form-factor processor cards is combined with one of Texas Instruments Sitara AM335x Processors and an LS Research TiWi-BLE WiFi and Bluetooth module. The MitySOM-335x WiFi/BLE module includes NAND FLASH and DDR3 RAM memory subsystems. A MitySOM-335x WiFi/BLE System on Module (SoM) provides a complete and flexible CPU infrastructure for highly integrated embedded systems that require WiFi and/or Bluetooth support.

The onboard AM335x processor provides Cortex-A8 32-bit RISC processor with a NEON SIMD coprocessor. This MPU is capable of running a rich set of real-time operating systems containing software applications programming interfaces (APIs) expected by modern system designers. The ARM architecture supports several operating systems, including Linux, QNX, and Windows CE.

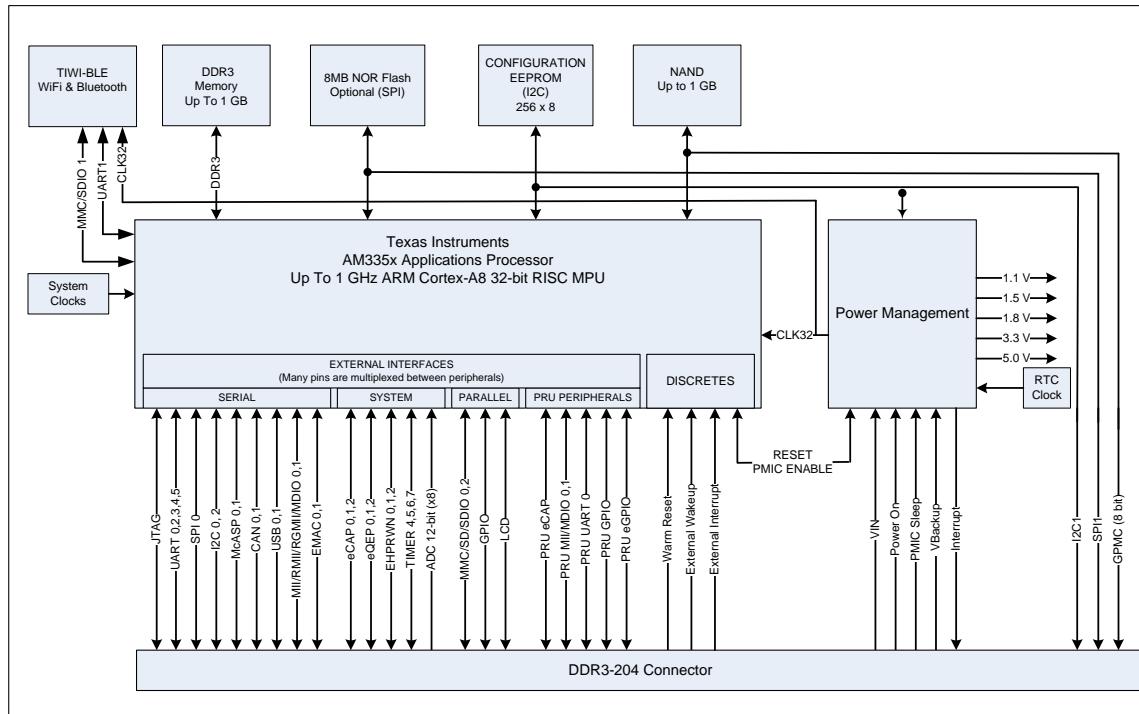


Figure 1 MitySOM-335x WiFi/BLE Block Diagram

Figure 1 provides a top level block diagram of the MitySOM-335x WiFi/BLE processor card. As shown in the figure, the primary interface to the module is through a standard DDR3 SO-DIMM-204 card edge interface. The interface provides power, synchronous serial connectivity, and many other interfaces provided by the Sitara processor. Details of the SO-DIMM-204 connector interface are included in the SO-DIMM-204 Interface Description, below.

## Onboard DDR3 Memory

The AM335x processor includes one dedicated 16 bit DDR SDRAM memory interface. The MitySOM-335x includes up to 1 GB of DDR3 RAM integrated on board the module. The memory bus interface is capable of burst transfer rates of 1600 MB / second.

## Onboard Storage Memory

### NAND FLASH (Optional)

Up to 1GB of on-board NAND FLASH memory is connected to the AM335x processor using the general purpose memory controller (GPMC) bus. The FLASH memory is 8 bits wide and is connected to the first chip select line of the GPMC (CS0). The FLASH memory is typically used to store the following types of data:

- Bootloaders
- ARM Linux / Windows CE / QNX embedded root file-system
- runtime ARM software
- runtime application data (non-volatile storage)

The GPMC bus is also accessible on the SO-DIMM-204 connector. It can be used to access external memories such as SDRAM, SRAM, NOR flash, NAND flash, or memory-mapped ASICs and FPGAs. The interface is a maximum of 8-bits wide.

### NOR FLASH (Optional)

8 MB of on-board NOR FLASH memory is connected to the AM335x using a Serial Peripheral Interface (SPI1 CS0). The AM335x provides up to 2 SPI interfaces with both interfaces available on the SO-DIMM connector.

### Configuration EEPROM

The MitySOM-335x WiFi/BLE contains a 256 x 8-bit EEPROM that is used to hold configuration data for the module. The EEPROM is connected to the AM335x using one of the three I2C interfaces available on AM335x, I2C1.

## External Interfaces

The AM335x makes extensive use of functional pin multiplexing to provide a highly configurable device that can be tailored to a multitude of applications. A list of the interfaces/functions that are available to the user is provided below.

- 2 Universal Serial Bus (USB) 2.0 High-Speed On the Go ports
- 2 Controller-Area Network (CAN) ports
- 2 Multichannel Audio Serial Ports (McASP)
- 2 Industrial Gigabit Ethernet MAC's (10/100/1000 Mbps)
- 2 MMC/SD/SDIO ports
  - MMC1 (4-bit) is connected to the TiWi-BLE
- 8 input, 12 bit A/D Converter
- LCD Controller
- 3 Enhanced Capture (eCAP) Modules
- 3 Enhanced High-Resolution PWM (eHRPWM) modules
- 3 32-bit Enhanced Quadrature Pulse Encoder (eQPE) modules
- 4 Timers
- 2 Serial Peripheral (SPI) ports
  - SPI Port 1 is also connected to the on-board NOR FLASH memory
- 5 Universal Asynchronous Receive/Transmit (UART) ports
  - UART1 is connected to the TiWi-BLE
- 2 Inter-Integrated Circuit (I2C) ports
  - I2C Port 1 connected to the on-board EEPROM and PMIC
- General Purpose Memory Controller (GPMC) interface
  - This interface is also connected to the on-board NAND FLASH
- JTAG/Debugger port

Additionally, most of the pin multiplexed signals can be configured as general purpose I/O signals with interrupt capability.

## Integrated TiWi-BLE Module

Integrated on the MitySOM-335x WiFi/BLE SoM is a TiWi-BLE combination WiFi and Bluetooth module from LS Research (LSR). The TiWi-BLE module interfaces directly with the AM335x Processor through the use of an MMC/SDIO interface, MMC1, and UART1 as well as 3 GPIOs (1\_12, 1\_13 and 2\_0). It is based on Texas Instruments WL1271 Transceiver and is supported by Critical Links Linux kernel.

### TiWi-BLE TX and RX Specifications

#### Transmit Power

- 20.0 dBm, 11 Mbps, CCK (b)
- 14.5 dBm, 54 Mbps, OFDM (g)
- 12.5 dBm, 65 Mbps, OFDM (n)

#### RX Sensitivity

- -89 dBm, 8% PER, 11 Mbps, CCK (b)
- -76 dBm, 10% PER, 54 Mbps, OFDM (g)
- -73 dBm, 10% PER, 65 Mbps, OFDM (n)

### Antenna Information

The MitySOM-335x WiFi/BLE is offered with a single external, U.FL, antenna connector. We recommend an antenna such as the LSR 001-0001. Please contact your Critical Link representative for information on this or other antenna options.

### Compliance Information

The TiWi-BLE module features worldwide acceptances; FCC (USA), IC (Canada), and CE (Europe). Further details about EMC Compliance from LS Research can be found on their website at <http://www.lsr.com/embedded-wireless-modules/wifi-plus-bluetooth-module/tiwi-ble#mod>.

## Software and Application Development Support

Users of the MitySOM-335x WiFi/BLE are encouraged to develop applications using the MitySOM-335x software development kit provided by Critical Link LLC. The SDK is an expansion of the TI platform support package for the AM335x and includes an implementation of an OpenEmbedded board support package providing an Angstrom based Linux root filesystem/distribution and compatible gcc compiler tool-chain with debugger.

## Growth Options

The MitySOM-335x WiFi/BLE SoM has been designed to support several upgrade options. These options include various speed grades, memory configurations, and operating temperature specifications including commercial and industrial temperature ranges. The available options are listed in the section below containing ordering information. For additional ordering information and details regarding these options, or to inquire about a particular configuration not listed below, please contact a Critical Link sales representative.

## ABSOLUTE MAXIMUM RATINGS

If Military/Aerospace specified cards are required, please contact the Critical Link Sales Office or unit Distributors for availability and specifications.

Maximum Supply Voltage, Vcc                    5.2 V

Storage Temperature Range                    -65 to 80C

## OPERATING CONDITIONS

Commercial Temperature Range	0°C to 70°C
Industrial Temperature Range	-40°C to 85°C
Humidity	0 to 95%
	Non-condensing

### SO-DIMM-204 Interface Description

The primary interface connector for the MitySOM-335x WiFi/BLE is the SO-DIMM DDR3 card edge interface which contains 4 classes of signals:

- Power (PWR)
- Dedicated signals mapped to the on-board Power Management device (PM)
- Dedicated signals mapped to the AM335xZCZ device (335D)
- Multi-function signals mapped to the AM335xZCZ device (335M)

Table 1 contains a summary of the MitySOM-335x WiFi/BLE pin mapping.

### Pin-Mux/Pin-Out Solution Guidance

As part of our commitment to superior customer support Critical Link is pleased to offer complimentary pin-out and pin-mux guidance for all MitySOM-335x customers. We will take your list of necessary peripherals and turn it into a detailed spreadsheet that shows where each peripheral could be accessed from our module. We have found that this service can save many days and even weeks in a design cycle compared to a customer who has not utilized this program.

To take advantage of this program please contact either your Critical Link representative or complete an Inquiry Form on our website (<http://www.criticallink.com/request-information/>).

Please include details such as the following: 16-bit LCD, capacitive I2C touch screen, 2 RS232, SD card and Dual Gigabit Ethernet. Any part numbers of components you may use are also very helpful.

**Table 1: MitySOM-335x WiFi/BLE Pin Mapping**

Grey - Signals that have no mux capabilities											
Red - Pins with dedicated functions that should not be altered (USB0, USB1, AIN and I2C1)											
Orange - Pins with dedicated functions if NAND (GPMC) memory is used on module											
Yellow - Pins with dedicated functions if NOR (SPI1) memory is used											
Purple - Pins with dedicated functions to support TiWi-BLE (WiFi/BT)											
Black – Pin functions added/changed for AM335x Revision 2.0+ Silicon											

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option
1	PWR	VIN	-	-	-						
2	PWR	GND	-	-	-						
3	PWR	VIN	-	-	-						
4	PWR	GND	-	-	-						
5	PWR	VIN	-	-	-						
6	PWR	GND	-	-	-						
7	PWR	VIN	-	-	-						
8	PWR	GND	-	-	-						
9	PWR	VIN	-	-	-						
10	PWR	GND	-	-	-						
11	PWR	VIN	-	-	-						
12	PWR	GND	-	-	-						
13	PWR	VIN	-	-	-						
14	PWR	GND	-	-	-						
15	PWR	VIN	-	-	-						
16	PWR	GND	-	-	-						
17	PWR	GND	-	-	-						
18	PWR	GND	-	-	-						
19	PWR	GND	-	-	-						
20	PWR	GND	-	-	-						
21	PWR	VIO_3P3	-	-	-						
22	PWR	VIO_1P8	-	-	-						
23	PWR	VIO_3P3	-	-	-						

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal	
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option	
24	PWR	VIO_1P8	-	-	-								
25	PWR	VIO_3P3	-	-	-								
26	PWR	VIO_1P8	-	-	-								
27	PWR	VIO_3P3	-	-	-								
28	PWR	VIO_1P8	-	-	-								
29	335M	LCD_DATA0	-	R1	3.3V	LCD_DATA0	GPMC_A0_MUX1	PR1_MII_MT0_CLK_MUX1	EHRPWM2A_MUX0		PR1_PRU1_PRU_R3_0[0]	PR1_PRU1_PRU_R3_1[0]	gpio2_6
30	PWR	LED_RTN	-	-									
31	335M	LCD_DATA1	-	R2	3.3V	LCD_DATA1	GPMC_A1_MUX1	PR1_MII0_TXEN_MUX1	EHRPWM2B_MUX0		PR1_PRU1_PRU_R3_0[1]	PR1_PRU1_PRU_R3_1[1]	gpio2_7
32	PM	PWR_ON	33	-	3.3V								
33	335M	LCD_DATA2	-	R3	3.3V	LCD_DATA2	GPMC_A2_MUX1	PR1_MII0_TXD3_MUX1	EHRPWM2_TRIPZONE_INPUT_MUX0		PR1_PRU1_PRU_R3_0[2]	PR1_PRU1_PRU_R3_1[2]	gpio2_8
34	PWR	VBACKUP	27	-									
35	335M	LCD_DATA3	-	R4	3.3V	LCD_DATA3	GPMC_A3_MUX1	PR1_MII0_TXD2_MUX1	EHRPWM0_SYNCOMUX0		PR1_PRU1_PRU_R3_0[3]	PR1_PRU1_PRU_R3_1[3]	gpio2_9
36	PM	PMIC_SLEEP	37	-	3.3V								
37	PWR	GND	-	-	-								
38	PWR	GND	-	-	-								
39	335M	LCD_DATA4	-	T1	3.3V	LCD_DATA4	GPMC_A4_MUX1	PR1_MII0_RXD1_MUX1	EQEP2A_IN_MUX0		PR1_PRU1_PRU_R3_0[4]	PR1_PRU1_PRU_R3_1[4]	gpio2_10
40	PWR	GND	-	-	-								
41	335M	LCD_DATA5	-	T2	3.3V	LCD_DATA5	GPMC_A5_MUX1	PR1_MII0_RXD0_MUX1	EQEP2B_IN_MUX0		PR1_PRU1_PRU_R3_0[5]	PR1_PRU1_PRU_R3_1[5]	gpio2_11
42	PWR	GND	-	-	-								
43	335M	LCD_DATA6	-	T3	3.3V	LCD_DATA6	GPMC_A6_MUX1	PR1_EDIO_DATA_I_N6_MUX1	EQEP2_INDEX_MUX0	PR1_EDIO_DATA_OUT6_MUX1	PR1_PRU1_PRU_R3_0[6]	PR1_PRU1_PRU_R3_1[6]	gpio2_12
44		No Connect											
45	335M	LCD_DATA7	-	T4	3.3V	LCD_DATA7	GPMC_A7_MUX1	PR1_EDIO_DATA_I_N7_MUX1	EQEP2_STROBE_MUX0	PR1_EDIO_DATA_OUT7_MUX1	PR1_PRU1_PRU_R3_0[7]	PR1_PRU1_PRU_R3_1[7]	gpio2_13
46		No Connect											
47	335M	LCD_DATA8	-	U1	3.3V	LCD_DATA8	GPMC_A12_MUX0	EHRPWM1_TRIPZONE_INPUT_MUX0	MCASP0_ACLKX_MUX1	UART5_RXD_MUX2	PR1_MII0_RXD3	UART2_CTSN_MUX1	gpio2_14
48	PWR	VDDS_HV4	-	H14	VDDSHV4	VDDSHV4							
49	335M	LCD_DATA9	-	U2	3.3V	LCD_DATA9	GPMC_A13_MUX0	EHRPWM0_SYNCOMUX0	MCASP0_FSX_MUX1	UART5_RXD_MUX2	PR1_MII0_RXD2	UART2_RTSN_MUX1	gpio2_15
50	PWR	VDDS_HV4	-	J14	VDDSHV4	VDDSHV4							
51	335M	LCD_DATA10	-	U3	3.3V	LCD_DATA10	GPMC_A14_MUX0	EHRPWM1A_MUX0	MCASP0_AXR0_MUX1		PR1_MII0_RXD1	UART3_CTSN_MUX1	GPIO2_16
52	PM	PMIC_INT_N	45	-	3.3V								
53	335M	LCD_DATA11	-	U4	3.3V	LCD_DATA11	GPMC_A15_MUX0	EHRPWM1B_MUX0	MCASP0_AHCLKR_MUX1	MCASP0_AXR2_MUX2	PR1_MII0_RXD0	UART3_RTSN_MUX1	gpio2_17
54	PWR	GND	-	-	-								

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal	Signal
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option	Option
55	PWR	GND	-	-	-								
56	PWR	GND	-	-	-								
57	335M	LCD_DATA12	-	V2	3.3V	GPMC_A16_MUX1	EQEP1A_IN_MUX0	MCASP0_ACLKR_MUX1	MCASP0_AXR2_MUX3	PR1_MII0_RXLINK	UART4_CTSN_MUX_X1	gpio0_8	
58	335M	GPMC_A0	-	R13	3.3V	GPMC_A0_MUX0	GMII2_TXEN	RGMII2_TCTL	RMII2_TXEN	GPMC_A16_MUX0	PR1_MII_MT1_CLK1	EHRPWM1_TRIPZONE_INPUT_MUX1	gpio1_16
59	335M	LCD_DATA13	-	V3	3.3V	LCD_DATA13	GPMC_A17_MUX1	EQEP1B_IN_MUX0	MCASP0_FSR_MUX_X1	MCASP0_AXR3_MUX3	PR1_MII0_RXER	UART4_RTSN_MUX_X1	gpio0_9
60	335M	GPMC_A1	-	V14	3.3V	GPMC_A1_MUX0	GMII2_RXDV	RGMII2_RCTL	MMC2_DAT0_MUX_X0	GPMC_A17_MUX0	PR1_MII1_RXD3	EHRPWM0_SYNCOMUX1	gpio1_17
61	335M	LCD_DATA14	-	V4	3.3V	LCD_DATA14	GPMC_A18_MUX1	EQEP1_INDEX_MUX0	MCASP0_AXR1_MUX_X0	UART5_RXD_MUX1	PR1_MII_MR0_CLK	UART5_CTSN_MUX_X1	gpio0_10
62	335M	GPMC_A2	-	U14	3.3V	GPMC_A2_MUX0	GMII2_TDX3	RGMII2_TD3	MMC2_DAT1_MUX_X0	GPMC_A18_MUX0	PR1_MII1_TXD2	EHRPWM1A_MUX1	gpio1_18
63	335M	LCD_DATA15	-	T5	3.3V	LCD_DATA15	GPMC_A19_MUX1	EQEP1_STROBE_MUX_X0	MCASP0_AHCLKX_MUX1	MCASP0_AXR3_MUX2	PR1_MII0_RXDV	UART5_RTSN_MUX_X1	gpio0_11
64	335M	GPMC_A3	-	T14	3.3V	GPMC_A3_MUX0	GMII2_TDX2	RGMII2_TD2	MMC2_DAT2_MUX_X0	GPMC_A19_MUX0	PR1_MII1_RXD1	EHRPWM1B_MUX1	gpio1_19
65	335M	LCD_PCLK	-	V5	3.3V	LCD_PCLK	GPMC_A10_MUX1	PR1_MII0_CRS_MUX_X1	PR1_EDIO_DATA_I_N4	PR1_EDIO_DATA_OUT4	PR1_PRU1_PRU_R3_0[10]	PR1_PRU1_PRU_R3_1[10]	gpio2_24
66	335M	GPMC_A4	-	R14	3.3V	GPMC_A4_MUX0	GMII2_TDX1	RGMII2_TD1	RMII2_TXD1	GPMC_A20_MUX0	PR1_MII1_RXD0	EQEP1A_IN_MUX1	gpio1_20
67	335M	LCD_VSYNC	-	U5	3.3V	LCD_VSYNC	GPMC_A8_MUX1	gmpc_a1	PR1_EDIO_DATA_I_N2	PR1_EDIO_DATA_OUT2	PR1_PRU1_PRU_R3_0[8]	PR1_PRU1_PRU_R3_1[8]	gpio2_22
68	335M	GPMC_A5	-	V15	3.3V	GPMC_A5_MUX0	GMII2_TXD0	RGMII2_TD0	RMII2_TXD0	GPMC_A21_MUX0	PR1_MII1_RXD3	EQEP1B_IN_MUX1	gpio1_21
69	335M	LCD_HSYNC	-	R5	3.3V	LCD_HSYNC	GPMC_A9_MUX1		PR1_EDIO_DATA_I_N3	PR1_EDIO_DATA_OUT3	PR1_PRU1_PRU_R3_0[9]	PR1_PRU1_PRU_R3_1[9]	gpio2_23
70	335M	GPMC_A6	-	U15	3.3V	GPMC_A6_MUX0	GMII2_TXCLK	RGMII2_TCLK	MMC2_DAT4_MUX_X0	GPMC_A22_MUX0	PR1_MII1_RXD2	EQEP1_INDEX_MUX_X1	gpio1_22
71	335M	LCD_AC_BIAS_EN	-	R6	3.3V	LCD_AC_BIAS_E_N	GPMC_A11_MUX1	PR1_MII1_CRS_MUX_X1	PR1_EDIO_DATA_I_N5	PR1_EDIO_DATA_OUT5	PR1_PRU1_PRU_R3_0[11]	PR1_PRU1_PRU_R3_1[11]	gpio2_25
72	335M	GPMC_A7	-	T15	3.3V	GPMC_A7_MUX0	GMII2_RXCLK	RGMII2_RCLK	MMC2_DAT5_MUX_X0	GPMC_A23_MUX0	PR1_MII1_RXD1	EQEP1_STROBE_MUX_X1	gpio1_23
73	PWR	GND	-	-	-								
74	PWR	GND	-	-	-								
75	335D	GPMC_AD0	-	U7	3.3V	gpme_ad0	mmc1_dat0_MUX2						gpio1_0
76	335M	GPMC_A8	-	V16	3.3V	GPMC_A8_MUX0	GMII2_RXD3	RGMII2_RD3	MMC2_DAT6_MUX_X0	GPMC_A24_MUX0	PR1_MII1_RXD0	MCASP0_ACLKX_MUX3	gpio1_24
77	335D	GPMC_AD1	-	V7	3.3V	gpme_ad1	mmc1_dat1_MUX2						gpio1_1
78	335M	GPMC_A9	-	U16	3.3V	GPMC_A9_MUX0	GMII2_RXD2	RGMII2_RD2	MMC2_DAT7_MUX_X0	GPMC_A25_MUX0	PR1_MII_MR1_CLK	MCASP0_FSX_MUX_X3	gpio1_25
79	335D	GPMC_AD2	-	R8	3.3V	gpme_ad2	mmc1_dat2_MUX2						gpio1_2
80	335M	GPMC_A10	-	T16	3.3V	GPMC_A10_MUX0	GMII2_RXD1	RGMII2_RD1	RMII2_RXD1	GPMC_A26_MUX0	PR1_MII1_RXDV	MCASP0_AXR0_MUX3	gpio1_26
81	335D	GPMC_AD3	-	T8	3.3V	gpme_ad3	mmc1_dat3_MUX2						gpio1_3
82	335M	GPMC_A11	-	V17	3.3V	GPMC_A11_MUX0	GMII2_RXD0	RGMII2_RD0	RMII2_RXD0	GPMC_A27_MUX0	PR1_MII1_RXER	MCASP0_AXR1_MUX3	gpio1_27
83	335D	GPMC_AD4	-	U8	3.3V	gpme_ad4	mmc1_dat4_MUX2						gpio1_4
84	335M	GPMC_CLK	-	V12	3.3V	GPMC_CLK_MUX_X0	LCD_MEMORY_CLOCK_MUX0	GPMC_WAIT1	MMC2_CLK_MUX0	PR1_MII1_CRS_MUX_X0	PR1_MDI0_MDCLK	MCASP0_FSR_MUX_X3	gpio2_1

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal	
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option	
85	335D	GPMC_AD5	-	V8	3.3V	GPMC_AD5	MMC1_DAT5_MUX0					gpio1_5	
86	335D	GPMC_BE0_N_CLE	-	T6	3.3V	GPMC_BE0N_CLE		TIMER5_MUX3				gpio2_5	
87	335D	GPMC_AD6	-	R9	3.3V	GPMC_AD6	MMC1_DAT6_MUX0					gpio1_6	
88	335D	GPMC_ADVN_ALE	-	R7	3.3V	GPMC_ADVN_ALE		TIMER4_MUX3				gpio2_2	
89	335D	GPMC_AD7	-	T9	3.3V	GPMC_AD7	MMC1_DAT7_MUX0					gpio1_7	
90	335D	GPMC_OEN_REN_N	-	T7	3.3V	GPMC_OEN_REN		TIMER7_MUX3				gpio2_3	
91	PWR	GND	-	-	-								
92	PWR	GND	-	-	-								
93		No Connect											
94		No Connect											
95		No Connect											
96		No Connect											
97		No Connect											
98	335D	GPMC_WE_N	-	U6	3.3V	GPMC_WEN		TIMER6_MUX3				gpio2_4	
99		No Connect											
100	335D	GPMC_WAIT0	-	T17	3.3V	GPMC_WAIT0	GMII2_CRS	GPMC_CS4	RMII2_CRS_DV	MMC1_SDCD_MUX0	PR1_MII1_COL	UART4_RXD_MUX2	gpio0_30
101	335M	No Connect											
102	335M	GPMC_BE1_N	-	U18	3.3V	GPMC_BE1N_MUX0	GMII2_COL	GPMC_CS6	MMC2_DAT3_MUX0	GPMC_DIR	PR1_MII1_RXLINK	MCASPO_ACLKR_MUX3	gpio1_28
103	335M	No Connect											
104	335D	GPMC_WP_N	-	U17	3.3V	GPMC_WPN	GMII2_RXER	GPMC_CS5	RMII2_RXER	MMC2_SDCD_MUX0	PR1_MII1_TXEN	UART4_TXD_MUX2	gpio0_31
105	335M	GPMC_AD14	-	V13	3.3V	GPMC_AD14	LCD_DATA17	MMC1_DAT6_MUX0	MMC2_DAT2_MUX1	EQEP2_INDEX_MUX1	PR1_MII0_RXD0_MUX0	PR1_PRU0_PRU_R31[14]	gpio1_14
106		No Connect											
107	335M	GPMC_AD15	-	U13	3.3V	GPMC_AD15	LCD_DATA16	MMC1_DAT7_MUX0	MMC2_DAT3_MUX1	EQEP2_STROBE_MUX1	PR1_ECAP0_ECAP_CAPIN_APWM0_MUX0	PR1_PRU0_PRU_R31[15]	gpio1_15
108		No Connect											
109	PWR	GND	-	-	-								
110	PWR	GND	-	-	-								
111		No Connect											
112	335M	RGMII1_RXD0	-	M16	3.3V	GMII1_RXD0	RMII1_RXD0	RGMII1_RD0	MCASPI_LAHCLKX_MUX0	MCASPI_LAHCLKR_MUX0	MCASPI_ACLKR_MUX1	MCASPO_AXR3_MUX4	gpio2_21
113		No Connect											
114	335M	RGMII1_RXD1	-	L15	3.3V	GMII1_RXD1	RMII1_RXD1	RGMII1_RD1	MCASPI_AXR3_MUX0	MCASPI_FSR_MUX0	EQEP0_STROBE_MUX1	MMC2_CLK_MUX2	gpio2_20
115	335D	USB0_VBUS	-	P15		USB0_VBUS							

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option
116	335M	RGMII1_RXD2	-	L16	3.3V	GMII1_RXD2	UART3_TXD_MU_X0	RGMII1_RD2	MMC0_DAT4	MMC1_DAT3_MUX1	UART1_RIN_MUX0	MCASP0_AXR1_MUX2
117	335D	USB0_ID	-	P16		USB0_ID						
118	335M	RGMII1_RXD3	-	L17	3.3V	GMII1_RXD3	UART3_RXD_MU_X0	RGMII1_RD3	MMC0_DAT5	MMC1_DAT2_MUX1	UART1_DTRN_MUX0	MCASP0_AXR0_MUX2
119	335D	USB1_VBUS	-	T18		USB1_VBUS						
120	335M	RGMII1_RXCLK_K	-	L18	3.3V	GMII1_RXCLK	UART2_TXD_MU_X0	RGMII1_RCLK	MMC0_DAT6	MMC1_DAT1_MUX1	UART1_DSRN_MUX0	MCASP0_FSX_MUX2
121	335D	USB1_DP	-	R17		USB1_DP						
122	335M	RGMII1_RXDV	-	J17	3.3V	GMII1_RXDV	LCD_MEMORY_C_LK_MUX1	RGMII1_RCTL	UART5_RXD_MUX1	MCASPI_ACLKX_MUX0	MMC2_DAT0_MUX2	MCASP0_ACLKR_MUX2
123	335D	USB1_DM	-	R18		USB1_DM						
124		No Connect										
125	335D	USB1_CE	-	P18		USB1_CE						
126	335M	RGMII1_TXCLK_K	-	K18	3.3V	GMII1_TXCLK	UART2_RXD_MU_X0	RGMII1_TCLK	MMC0_DAT7	MMC1_DAT0_MUX1	UART1_DCDN_MUX0	MCASP0_ACLKX_MUX2
127	PWR	GND	-	-	-							
128	335M	RGMII1_TXD0	-	K17	3.3V	GMII1_TXD0	RMII1_TXD0	RGMII1_TD0	MCASPI_AXR2_MUX0	MCASPI_ACLKR_MUX0	EQEP0B_IN_MUX1	MMC1_CLK_MUX1
129	335D	USB1_ID	-	P17		USB1_ID						
130	335M	RGMII1_TXD1	-	K16	3.3V	GMII1_TXD1	RMII1_TXD1	RGMII1_TD1	MCASPI_FSR_MUX1	MCASPI_AXR1_MUX0	EQEP0A_IN_MUX1	MMC1_CMD_MUX1
131	335D	USB0_DM	-	N18		USB0_DM						
132	335M	RGMII1_TXD2	-	K15	3.3V	GMII1_TXD2	DCAN0_RX_MUX0	RGMII1_TD2	UART4_RXD_MUX0	MCASPI_AXR0_MUX0	MMC2_DAT2_MUX2	MCASP0_AHCLKX_MUX2
133	335D	USB0_DP	-	N17		USB0_DP						
134	335M	RGMII1_TXD3	-	J18	3.3V	GMII1_TXD3	DCAN0_TX_MUX0	RGMII1_TD3	UART4_RXD_MUX0	MCASPI_FSR_MUX0	MMC2_DAT1_MUX2	MCASP0_FSR_MUX2
135	335D	USB0_CE	-	M15		USB0_CE						
136	335M	RGMII1_TXEN	-	J16	3.3V	GMII1_TXEN	RMII1_TXEN	RGMII1_TCTL	TIMER4_MUX0	MCASPI_AXR0_MUX1	EQEP0_INDEX_MUX1	MMC2_CMD_MUX2
137	335M	USB1_DRVVBU_S	-	F15	3.3V	USB1_DRVVBUS						
138	335M	RGMII1_COL	-	H16	3.3V	GMII1_COL	RMII2_REFCLK	SPII_SCLK_MUX1	UART5_RXD_MUX0	MCASPI_AXR2_MUX1	MMC2_DAT3_MUX2	MCASP0_AXR2_MUX4
139	335M	USB0_DRVVBU_S	-	F16	3.3V	USB0_DRVVBUS						
140		No Connect										
141	335M	MDC	-	M18	3.3V	MDIO_CLK	TIMER5_MUX2	UART5_RXD_MUX3	UART3_RTSN_MUX2	MMC0_SDWP_MUX2	MMC1_CLK_MUX2	MMC2_CLK_MUX1
142		No Connect										
143	335M	MDIO	-	M17	3.3V	MDIO_DATA	TIMER6_MUX2	UART5_RXD_MUX3	UART3_CTSN_MUX2	MMC0_SDCD_MUX2	MMC1_CMD_MUX2	MMC2_CMD_MUX1
144	335M	MCASP0_AXR1	-	D13	3.3V	MCASP0_AXR1_MUX0	EQEP0_INDEX_MUX0		MCASPI_AXR0_MUX2	EMU3_MUX2	PR1_PRU0_PRU_R3[0 6]	PR1_PRU0_PRU_R3[1 6]
145	335M	RMII1_REFCLK	-	H18	3.3V	RMII1_REFCLK	XDMA_EVENT_IN_TR2_MUX0	SPII_CS0_MUX1	UART5_RXD_MUX0	MCASPI_AXR3_MUX1	MMC0_POW_MUX0	MCASP1_AHCLKX_MUX1
146	PWR	GND	-	-	-							

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal	Signal
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option	Option
147	335M	I2C1_SDA	-	H17	3.3V	I2C1_SDA							
148	335M	MCASP0_FSR	-	C13	3.3V	MCASP0_FSR_M	EQEP0B_IN_MUX0	MCASP0_AXR3_M	MCASP1_FSX_MU	EMU2_MUX2	PR1_PRU0_PRU_R3_0[5]	PR1_PRU0_PRU_R3_1[5]	gpio3_19
149	335D	I2C1_SCL	-	J15	3.3V	I2C1_SCL							
150	335M	MCASP0_ACLKR	-	B12	3.3V	MCASP0_AXLR	EQEP0A_IN_MUX0	MCASP0_AXR2_M	MCASP1_ACLKX_M	MMC0_SDWP_MU	PR1_PRU0_PRU_R3_0[4]	PR1_PRU0_PRU_R3_1[4]	gpio3_18
151	335M	MMC0_CMD	-	G18	VDDSHV4	MMC0_CMD	GPMC_A25_MUX1	UART3_RTSN_MU	UART2_RXD_MUX2	DCAN1_RX_MUX2	PR1_PRU0_PRU_R3_0[13]	PR1_PRU0_PRU_R3_1[13]	gpio2_31
152	335M	MCASP0_ACLKX	-	A13	3.3V	MCASP0_AXLX	EHRPWM0A_MUX0		SPI1_SCLK_MUX2	MMC0_SDCD_MU	PR1_PRU0_PRU_R3_0[0]	PR1_PRU0_PRU_R3_1[0]	gpio3_14
153	335M	MMC0_CLK	-	G17	VDDSHV4	MMC0_CLK	GPMC_A24_MUX1	UART3_CTSN_MU	UART2_RXD_MUX2	DCAN1_TX_MUX2	PR1_PRU0_PRU_R3_0[12]	PR1_PRU0_PRU_R3_1[12]	gpio2_30
154	335M	MCASP0_AHCLKX	-	A14	3.3V	MCASP0_AXAHCLKX	EQEP0_STROBE_MUX0	MCASP0_AXR3_M	MCASP1_AXR1_M	EMU4_MUX2	PR1_PRU0_PRU_R3_0[7]	PR1_PRU0_PRU_R3_1[7]	gpio3_21
155	335M	MMC0_DAT0	-	G16	VDDSHV4	MMC0_DAT0	GPMC_A23_MUX1	UART5_RTSN_MU	UART3_RXD_MUX2	UART1_RIN_MUX1	PR1_PRU0_PRU_R3_0[11]	PR1_PRU0_PRU_R3_1[11]	gpio2_29
156	335D	EXTINT_N	-	B18	3.3V	nNMI							
157	335M	MMC0_DAT1	-	G15	VDDSHV4	MMC0_DAT1	GPMC_A22_MUX1	UART5_CTSN_MU	UART3_RXD_MUX2	UART1_DTRN_MUX	PR1_PRU0_PRU_R3_0[10]	PR1_PRU0_PRU_R3_1[10]	gpio2_28
158	335D	WARMRST_N	-	A10	3.3V	nRESETIN_OUT							
159	335M	MMC0_DAT2	-	F18	VDDSHV4	MMC0_DAT2	GPMC_A21_MUX1	UART4_RTSN_MU	TIMER6_MUX0	UART1_DSRN_MUX	PR1_PRU0_PRU_R3_0[9]	PR1_PRU0_PRU_R3_1[9]	gpio2_27
160	335M	EMU0	-	C14	3.3V	EMU0							gpio3_7
161	335M	MMC0_DAT3	-	F17	VDDSHV4	MMC0_DAT3	GPMC_A20_MUX1	UART4_CTSN_MU	TIMER5_MUX0	UART1_DCDN_MUX	PR1_PRU0_PRU_R3_0[8]	PR1_PRU0_PRU_R3_1[8]	gpio2_26
162	335M	EMU1	-	B14	3.3V	EMU1							gpio3_8
163	PWR	GND	-	-	-								
164	PWR	GND	-	-	-								
165	335M	UART0_CTSN	-	E18	3.3V	UART0_CTSN	UART4_RXD_MUX	DCAN1_TX_MUX0	I2C1_SDA_MUX1	SPI1_D0_MUX0	TIMER7_MUX0	PR1_EDC_SYNC0_OUT	gpio1_8
166	335D	TCK	-	A12	3.3V	TCK							
167	335M	UART0_RTSN	-	E17	3.3V	UART0_RTSN	UART4_RXD_MUX	DCAN1_RX_MUX0	I2C1_SCL_MUX1	SPI1_D1_MUX0	SPI1_CS0_MUX2	PR1_EDC_SYNC1_OUT	gpio1_9
168	335D	TDI	-	B11	3.3V	TDI							
169	335M	UART0_TXD	-	E16	3.3V	UART0_TXD	SPI1_CS1_MUX3	DCAN0_RX_MUX1	I2C2_SCL_MUX1	ECAP1_IN_PWM1_OUT_MUX1	PR1_PRU1_PRU_R3_0[15]	PR1_PRU1_PRU_R3_1[15]	gpio1_11
170	335D	TDO	-	A11	3.3V	TDO							
171	335M	UART0_RXD	-	E15	3.3V	UART0_RXD	SPI1_CS0_MUX3	DCAN0_TX_MUX1	I2C2_SDA_MUX1	ECAP2_IN_PWM2_OUT_MUX0	PR1_PRU1_PRU_R3_0[14]	PR1_PRU1_PRU_R3_1[14]	gpio1_10
172	335D	TMS	-	C11	3.3V	TMS							
173	335M	No Connect	-	-	3.3V								
174	335D	TRSTN	-	B10	3.3V	nTRST							
175	335M	No Connect	-	-	3.3V								
176	PWR	VREFN	-	A9	1.8V	VREFN							
177	335M	I2C0_SDA	-	C17	3.3V	I2C0_SDA	TIMER4_MUX2	UART2_CTSN_MUX	ECAP2_IN_PWM2_OUT_MUX2				gpio3_5

PIN	Class	Signal Name	PMIC	AM335x	Power	Signal	Signal	Signal	Signal	Signal	Signal	Signal	Signal
			Pin	Pin	Domain	Option	Option	Option	Option	Option	Option	Option	Option
178	PWR	VREFP	-	B9	1.8V	VREFP							
179	335M	I2C0_SCL	-	C16	3.3V	I2C0_SCL	TIMER7_MUX2	UART2_RTSN_MUX0	ECAPI_IN_PWM1_OUT_MUX2				gpio3_6
180	335D	EXT_WAKEUP	-	C5	1.8V	EXT_WAKEUP							
181	PWR	GND	-	-	-								
182	PWR	GND	-	-	-								
183	335M	SPI0_D0	-	B17	3.3V	SPI0_D0	UART2_TXD_MUX3	I2C2_SCL_MUX2	EHRPWM0B_MUX1	PR1_UART0 RTS_N_MUX0	PR1_EDIO_LATCH_IN	EMU3_MUX1	gpio0_3
184	335D	AIN0	-	B6	1.8V	AIN0							
185	335M	SPI0_D1	-	B16	3.3V	SPI0_D1	MMC1_SDWP_MUX0	I2C1_SDA_MUX3	EHRPWM0_TRIPZONE_INPUT_MUX1	PR1_UART0_RXD_MUX0	PR1_EDIO_DATA_IN0	PR1_EDIO_DATA_OUT0	gpio0_4
186	335D	AIN1	-	C7	1.8V	AIN1							
187	335M	SPI0_SCLK	-	A17	3.3V	SPI0_SCLK	UART2_RXD_MUX3	I2C2_SDA_MUX2	EHRPWM0A_MUX1	PR1_UART0 CTS_N_MUX0	PR1_EDIO_SOF	EMU2_MUX1	gpio0_2
188	335D	AIN2	-	B7	1.8V	AIN2							
189	335M	SPI0_CS1	-	C15	3.3V	SPI0_CS1	UART3_RXD_MUX1	ECAPI_IN_PWM1_OUT_MUX0	MMC0_POW_MUX1	XDMA_EVENT_IN TR2_MUX1	MMC0_SDCD_MUX0	EMU4_MUX1	gpio0_6
190	335D	AIN3	-	A7	1.8V	AIN3							
191	335M	MMC2_SDWP_MUX0	-	A16	3.3V	SPI0_CS0	MMC2_SDWP_MUX0	I2C1_SCL_MUX3	EHRPWM0_SYNC1_MUX1	PR1_UART0_RXD_MUX0	PR1_EDIO_DATA_IN1	PR1_EDIO_DATA_OUT1	gpio0_5
192	335D	AIN4	-	C8	1.8V	AIN4							
193	335D	SPII_SCLK	-	C18	3.3V	ECAPI_IN_PWM0_OUT	UART3_TXD_MUX1	SPII_CS1_MUX1	PR1_ECAPI_ECAP_CAPI_APWM_O_MUX1	SPII_SCLK_MUX0	MMC0_SDWP_MUX0	XDMA_EVENT_IN TR2_MUX2	gpio0_7
194	335D	AIN5	-	B8	1.8V	AIN5							
195	335D	SPII_D0_MOSI	-	B13	3.3V	MCASPO_FSX_MUX0	EHRPWM0B_MUX0		SPII_D0_MUX2	MMC1_SDCD_MUX1	PR1_PRU0_PRU_R3_0[1]	PR1_PRU0_PRU_R3_1[1]	gpio3_15
196	335D	AIN6	-	A8	1.8V	AIN6							
197	335D	SPII_D1_MISO	-	D12	3.3V	MCASPO_AXR0_MUX0	EHRPWM0_TRIPZONE_INPUT_MUX0		SPII_D1_MUX2	MMC2_SDCD_MUX1	PR1_PRU0_PRU_R3_0[2]	PR1_PRU0_PRU_R3_1[2]	gpio3_16
198	335D	AIN7	-	C9	1.8V	AIN7							
199	PWR	GND	-	-	-								
200	PWR	GND	-	-	-								
201	335M	XDMA_EVENT_INTR1	-	D14	3.3V	XDMA_EVENT_I_NTR1		TCLKIN	CLKOUT2	TIMER7_MUX1	PR1_PRU0_PRU_R3_1[16]	EMU3_MUX0	gpio0_20
202	PWR	AGND	-	-	-								
203	335M	XDMA_EVENT_INTR0	-	A15	3.3V	XDMA_EVENT_I_NTR0		TIMER4_MUX1	CLKOUT1	SPII_CS1_MUX2	PR1_PRU1_PRU_R3_1[16]	EMU2_MUX0	gpio0_19
204	PWR	AGND	-	-	-								

Note (1): The PowerOn pin (32) has a pull-up resistor on the module so it can be left floating if user control is not desired.

Note (2): Please reference Table 2 for information on the maximum current supply of these voltage outputs.

## MitySOM-335x On-Board Pin Functions

The following table lists AM335x pins that are not brought off-module and/or whose functions must remain fixed as noted. This may impact the ability to use other peripherals.

AM335x Pin	Pin-Mux Function	Peripheral Supported	Previous MitySOM-335x Edge Pin
D15	UART1_TXD	TiWi-BLE	107
D16	UART1_RXD	TiWi-BLE	175
D18	UART1_RTS	TiWi-BLE	N/A
D17	UART1_CTS	TiWi-BLE	N/A
C12	SPI1_CS0_MUX4	NOR	N/A
V6	GPMC_CS0_N	NAND	N/A
V9	MMC1_CMD_MUX0	TiWi-BLE	111
U9	MMC1_CLK_MUX0	TiWi-BLE	113
U10	MMC1_DAT0_MUX0	TiWi-BLE	93
T10	MMC1_DAT1_MUX0	TiWi-BLE	95
T11	MMC1_DAT2_MUX0	TiWi-BLE	97
U12	MMC1_DAT3_MUX0	TiWi-BLE	99
R12	GPIO1_13	TiWi-BLE	103
T12	GPIO1_12	TiWi-BLE	101
T13	GPIO2_0	TiWi-BLE	94

## ELECTRICAL CHARACTERISTICS

**Table 2: Electrical Characteristics**

Symbol	Parameter	Conditions	Min	Typ	Max	Units
<b>VIN</b>	Voltage supply, volt input.		3.2	3.3	5.2	Volts
<b>I<sub>VIO_3P3</sub></b>	Max current supply <sup>3</sup>	3.3 volt IO output			50	mA
<b>I<sub>VIO_1P8</sub></b>	Max current supply <sup>3</sup>	1.8 volt IO output			500	mA
<b>I<sub>3.3</sub></b>	Quiescent Current draw <sup>1</sup>	3.3 volt input, No WiFi/BT Refer to Table 3 for TiWi current usage	-	300	-	mA
<b>I<sub>3.3-max</sub></b>	Max current draw <sup>1</sup>	3.3 volt input, No WiFi/BT Refer to Table 3 for TiWi current usage	-	520	TBD	mA
<b>I<sub>VBackup</sub></b>	VBACKUP Current draw <sup>2</sup>	3.3 VIN applied to SoM	-	<1	1	uA
<b>I<sub>VBackup-Active</sub></b>	VBACKUP Current draw	PMIC RTC active	-	10.2	-	uA
<b>FCPU</b>	CPU internal clock Frequency (PLL output)		275	800	1000	MHz
<b>FEMIF</b>	GPMC bus frequency		-		-	MHz
<b>VDD SHV2v</b>	AM335x HV2 IO Voltage Input <sup>4</sup>			3.3		Volts
		1. Power utilization of the MitySOM-335x is heavily dependent on end-user application and WiFi/BT utilization. Major factors include: ARM CPU PLL configuration, CPU Utilization, and external DDR3 RAM utilization. 2. VBACKUP current measurement limited by test equipment, current consumption was less than 1 micro amp. 3. The MitySOM-335x module provides both 1.8V (Pins 22, 24, 26 and 28) and 3.3V (Pins 21, 23, 25 and 27) output supplies from the module. These outputs are sequenced from the PMIC and the maximum power output specified should not be exceeded as these supplies also power the module itself. 4. The MitySOM-335x WiFi/BLE module ties the HV2 power domain on the AM335x processor to 3.3V so any pins (84, 105 and 107) utilizing that voltage domain are fixed a 3.3V.				

## TiWi-BLE Electrical Characteristics

The TiWi-BLE module that is integrated into the MitySOM-335x WiFi/BLE can draw significant current while transmitting and/or receiving data. The table below shows the electrical characteristics for different operating conditions.

**Table 3: TiWi-BLE Electrical Characteristics**

Symbol	Parameter	Conditions	Min	Typ	Max	Units
<b>I<sub>TX-802.11b</sub></b>	CCK (802.11b) TX Current	3.6V Input to TiWi-BLE	-	280	-	mA
<b>I<sub>TX-802.11g</sub></b>	OFDM (802.11g) TX Current	3.6V Input to TiWi-BLE	-	194	-	mA
<b>I<sub>TX-802.11n</sub></b>	OFDM (802.11n) TX Current	3.6V Input to TiWi-BLE	-	187	-	mA
<b>I<sub>RX-b/g/n</sub></b>	CCK(b)/OFDM(g)/OFDM(n) RX Current		-	100	-	mA
<b>I<sub>VIO</sub></b>	VIO Current		-	-	16	mA
<b>I<sub>BT TX</sub></b>	Bluetooth TX Current		-	45	-	mA
<b>I<sub>BT RX</sub></b>	Bluetooth RX Current		-	41	-	mA

## ORDERING INFORMATION

The following table lists the standard module configurations. For shipping status, availability, and lead time of these or other configurations please contact your Critical Link representative.

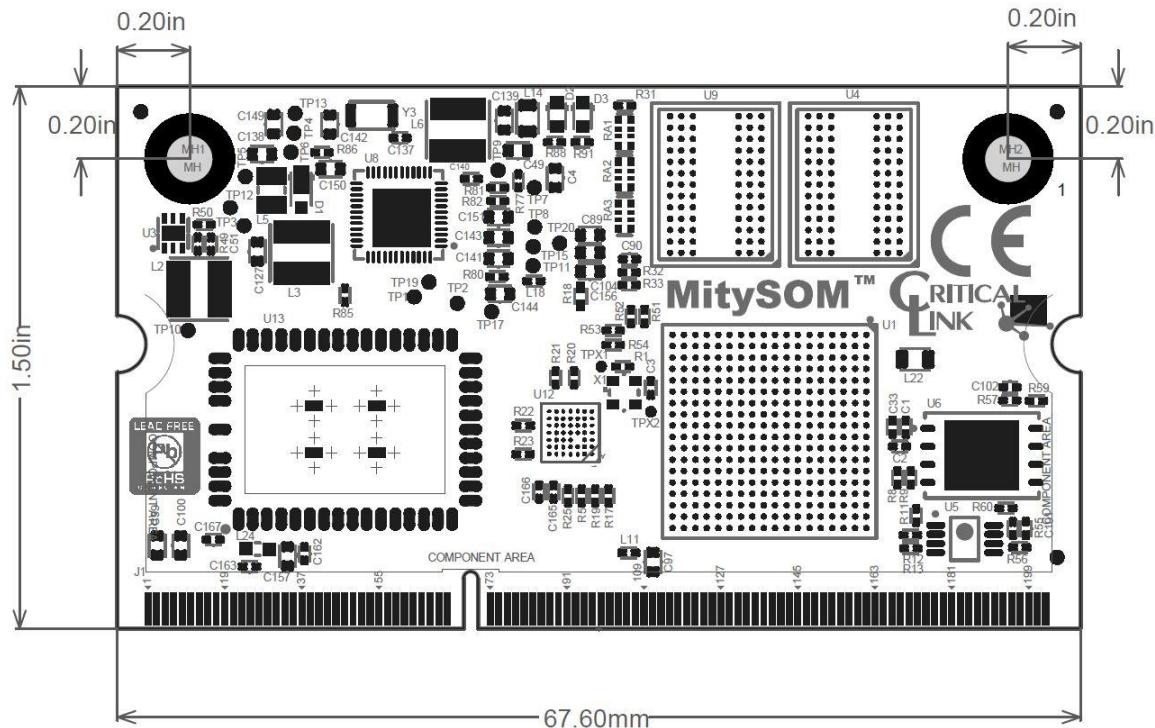
**Table 4: Standard Model Numbers**

Model	ARM Speed	NOR	NAND Flash	DDR3 RAM	Temp
3354-GX-X38-RC-BLE	720 MHz	N/A	512 MB	512 MB	0°C to 70°C
*3354-HX-X38-RC-BLE	800 MHz	N/A	512 MB	512 MB	0°C to 70°C
*3354-HX-X38-RI-BLE	800 MHz	N/A	512 MB	512 MB	-40°C to 85°C

Note: TI's AM3354 Silicon Revision 1.0 has maximum frequency of 720MHz

## MECHANICAL INTERFACE

A mechanical outline of the MitySOM-335x WiFi/BLE is illustrated in Figure 2, below.



**Figure 2 MitySOM-335x WiFi/BLE Mechanical Outline**

## REVISION HISTORY

Date	Change Description
10-MAY-2013	Draft Spec. of MitySOM-335x-WiFi
25-JUL-2013	Initial release
17-MAR-2014	Update MitySOM product name
22-OCT-2014	Updates for TiWi-R2 to TiWi-BLE transition