Component Map

2.4GHz 2x U.FL Connectors
chain0 chain1

Serial Port

Buzzer

LED Header

USB Header
GND
Data-
Data-
+5V

3.3V Pin Header
GND
+3.3V

LED Array 2

MiniPCIe Slot

SIM Socket

LED Array 1

Ethernet Port 0
PoE input

Ethernet Port 1

DC Jack

Reset Button
(Hardware)

JTAG Interface

SIM Header
UIM_PWR, UIM_DATA UIM_CLK UIM_RST GND

PD Module (for IEEE 802.3af Support)
NC NC VDD GND 8/7 5/4/ 6/3 2/1
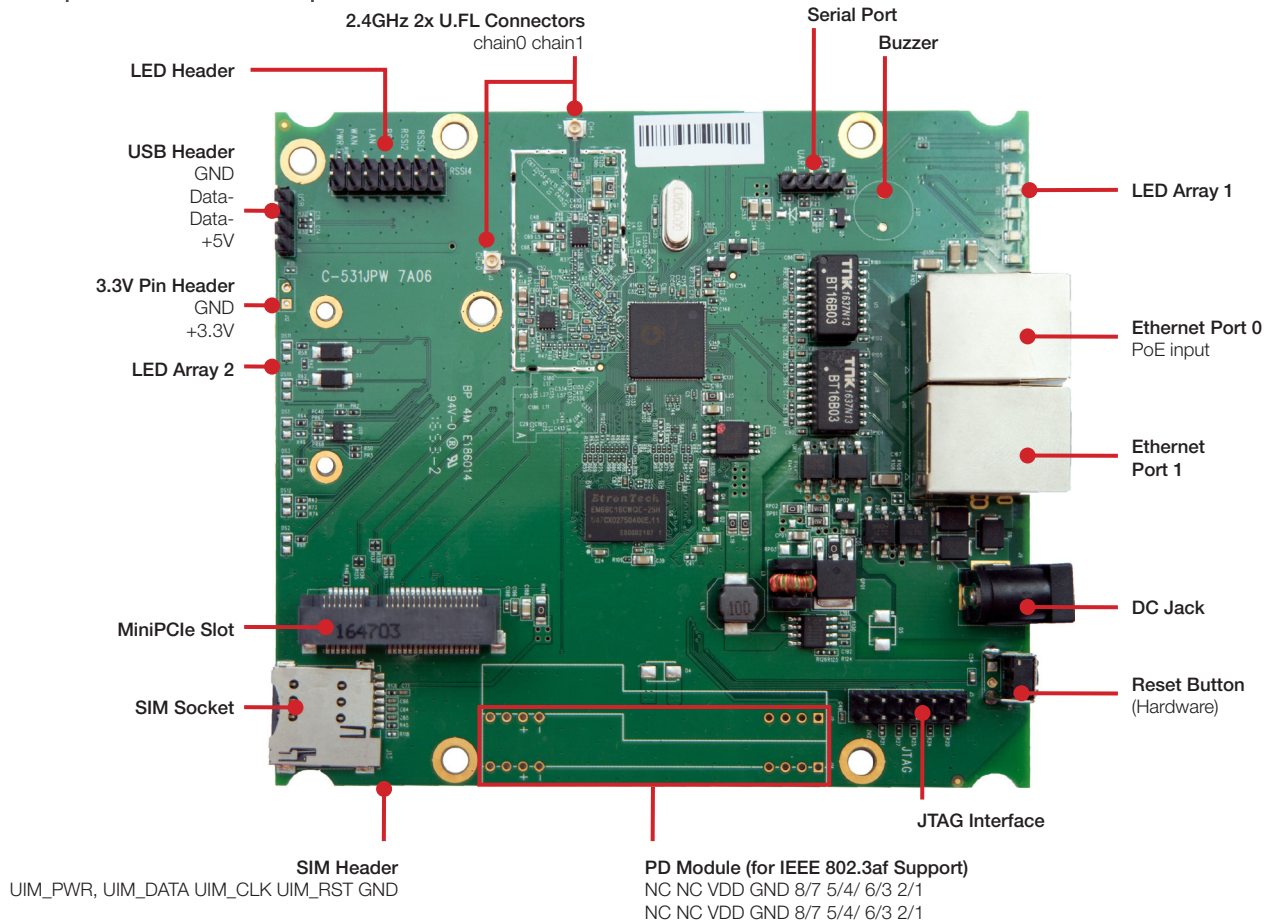NC NC VDD GND 8/7 5/4/ 6/3 2/1

Power Requirements

Power Over Ethernet	1x IEEE 802.3af/at or Passive PoE input minimum 36V for HV, Passive PoE input 12~24V for LV
DC Power	1x DC Jack Connector: 12~24V for LV, 36~56V for HV
Power Consumption	6.9 Watts (Max)

Ethernet 0 PINOUT

Pin	Signal
1	TX+/POE+
2	TX-/POE+
3	RX+/POE-
4	TX+/POE+
5	TX-/POE+
6	RX-/POE-
7	RX+/POE-
8	RX-/POE-

Serial Port Pin Assignment

Pin	Signal
1	VCC – 3.3V
2	UART 0 Transmit Data
3	UART 0 Receive Data
4	GND

LED Header

Down pin	Up pin	Function
+2.5V	GPIO16	RSS4/Diag
+2.5V	GPIO15	RSS3
+2.5V	GPIO14	RSS2
+2.5V	GPIO12	RSS1
+2.5V	Ethernet1 LED	Ethernet1
+2.5V	Ethernet0 LED	Ethernet0
+3.3V	GND	Power

GPIO Pin Mapping

GPIO Pin	Function
GPIO0	TCK
GPIO1	TDI
GPIO2	TDO
GPIO3	TMS
GPIO4	BUZZER CONTRL
GPIO5	SPI_CS_L
GPIO6	SPI_CLK
GPIO7	SPI_MO_SI
GPIO8	SPI_MI_SO
GPIO9	UART_SIN
GPIO10	UART_SOUT
GPIO11	LAN LED
GPIO12	RSSI 1 LED / EEPROM DATA
GPIO13	WAN LED
GPIO14	RSSI 2 LED / EEPROM CLK
GPIO15	RSSI 3 LED
GPIO16	RSSI 4 LED / DIAG
GPIO17	JUMP_ST_SW

LED Array Pin

Array 1		Array 2	
Pin	Signal	Pin	Signal
1	RSS4/Diag	1	RSS4/Diag
2	RSS3	2	RSS3
3	RSS2	3	RSS2
4	RSS1	4	RSS1
5	Ethernet	5	Ethernet1
6	Power	6	Ethernet0
		7	Power

SIM Slot Pin

Function	Pin
CD	C4
CLK	C3
I/O	C7
RST	C2
VPP	C6
VCC	C1
GND	C5

JTAG Interface Pin Assignment

Pin	Signal	Pin	Signal
1	TRST_N	2	GND
3	TDI	4	GND
5	TDO	6	GND
7	TMS	8	GND
9	TCK	10	GND
11	RESET	12	NC
13	DINT	14	3V3

miniPCIe Slot Pin Assignment

Top side		Bottom side	
1	WAKE_L	2	+3.3V
3	NC	4	GND
5	NC	6	NC
7	CLKREQ_L	8	UIM_PWR
9	GND	10	UIM_DATA
11	REFCLK-	12	UIM_CLK
13	REFCLK+	14	UIM_RST
15	GND	16	UIM_VPP
Mechanical key			
17	NC	18	GND
19	NC	20	W_DISABLE_L
21	GND	22	PERST_L
23	PERn0	24	+3.3Vaux
25	PERp0	26	GND
27	GND	28	NC
29	GND	30	NC
31	PETn0	32	NC
33	PETp0	34	GND
35	GND	36	USB_D-
37	NC	38	USB_D+
39	NC	40	GND
41	NC	42	NC
43	NC	44	NC
45	NC	46	NC
47	NC	48	NC
49	NC	50	GND
51	NC	52	+3.3V