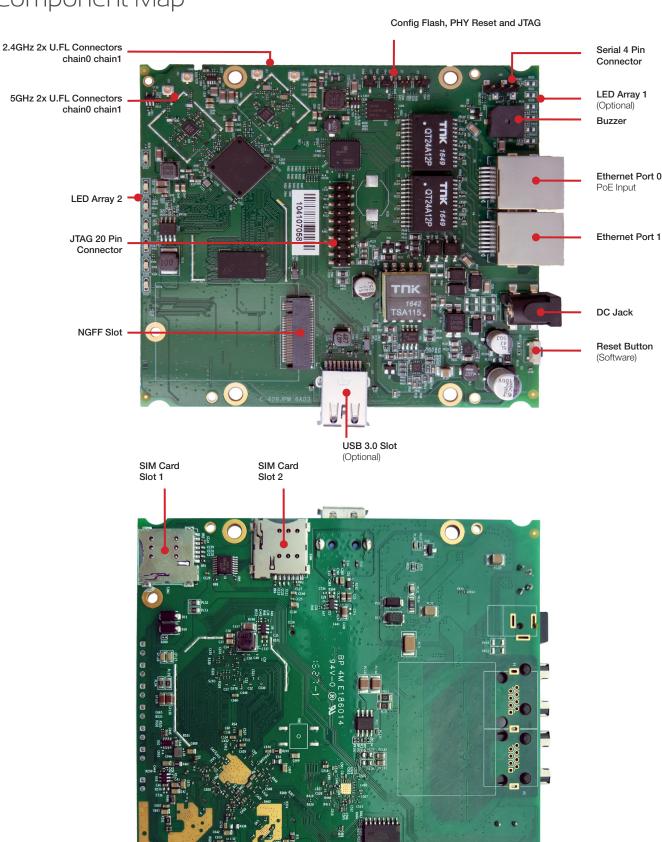


# HARDWARE GUIDE - WPJ428 6A03

# Component Map







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#### Power Requirements

Power Over Ethernet	t IEEE 802.3af/at or Passive PoE 36~56V (for HV version Passive PoE 24V (for LV version)		
50110	04 501/4 10/		

DC Jack Connector 24~56V (for HV version) 12~24V (for LV version)

Power Consumption 19 Watts (Max)

### LED Pin GPIO Mapping

LED Array 1		LED Array 2		OPIO	
Pin	Signal	Pin	Signal	GPIO	
1	RSS4	1	RSS4	GPIO5	
2	RSS3	2	RSS3	GPIO4	
3	RSS2	3	RSS2	GPIO3	
4	RSS1	4	RSS1	GPIO2	
5	Ethernet	5	Ethernet1	-	
6	Power	6	Ethernet0	-	
		7	Power	-	

### Configuration of Jumpers

Pin	Configura- tion 1	Pin	Configura- tion 2	Jumper Location
1	NC	1	GPIO	
2	ITAC	2	(Good)	JJ23
3	JTAG	3	NC	
1	PHY reset	1	NC	
2	(Good)	2		J26
3	NC	3	NAND reset	
1		1	NC	
2	NC (Good)	2	NOR +	J27
3	(Good)	3	NAND flash	
1	NC	1		
2	NOR flash	2	NC	J23
3	(Good)	3		

Note: Use the recommended (Good) configurations only. This board does not support other configurations. The board is shipped in the NOR flash configuration. The board's '0' marking is next to Pin I. The grey cells above indicate shorting jumpers.

# Serial Port Pin Assignment

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

#### SIM Slot Pin Assignment

SIM SLOT 1		SIM SLOT 2		SIM Signal
1	vcc	1	vcc	vcc
2	RST	2	RST	SIM_RST
3	CLK	3	CLK	SIM_CLK
4	CD	4	CD	SIM_CARD_IN
5	GND	5	GND	GND
6	VPP	6	VPP	VPP
7	I/O	7	I/O	SIM_DATA

#### JTAG Interface Pin Assignment

Pin	Signal	Pin	Signal
1	3.3V	2	3.3V
3	JTAG_TRST_N	4	NC
5	JTAG_TDI	6	GND
7	JTAG_TMS	8	GND
9	JTAG_TCK	10	GND
11	NC	12	NC
13	JTAG_TDO	14	GND
15	JTAG_RST_N	16	NC
17	GND	18	GND
19	GND	20	GND

### GPIO Pin Mapping

GPIO Pin	GPIO Pin	
GPIO_0	JTAG TDI/EEPROM_SCK	
GPIO_1	JTAG TCK/EEPROM_SDA	
GPIO_2	JTAG TMS/SIM_CARD_IN	
GPIO_3	JTAG TDO/SIM_SELECT	
GPIO_4	JTAG_RST_N	
GPIO_5	JTAG_TRST_N	
GPIO_52	EMDC	
GPIO_53	EMDIO	
GPIO_54	SPI_CS	
GPIO_55	SPI_MOSI	
GPIO_56	SPI_CLK	
GPIO_57	SPI_MISO	
GPIO_58	BUZZER	
GPIO_59	SPINANDcs_SPINORrst	
GPIO_60	UART_RX	
GPIO_61	UART_TX	
GPIO_62	SYS_RST_L	
GPIO_63	NC	





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# Ethernet Port O Pin Assignment

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-	

# NGFF (M.2) Slot Pin Assignment

Top side		Bottom side	
1	NC		
3	GND	2	3.3V
5	GND	4	3.3V
7	USB D+	6	NC
9	USB D-	8	NC
11	GND	10	NC
13	Mechanical key	12	Mechanical key
15	Mechanical key	14	Mechanical key
17	Mechanical key	16	Mechanical key
19	Mechanical key	18	Mechanical key
21	NC	20	NC
23	NC	22	NC
25	NC	24	NC
27	GND	26	NC
29	NC	28	NC
31	NC	30	SIM_RST
33	GND	32	SIM_CLK
35	NC	34	SIM_DATA
37	NC	36	SIM_PWR
39	GND	38	NC
41	NC	40	NC
43	NC	42	NC
45	GND	44	NC
47	NC	46	NC
49	NC	48	NC
51	GND	50	NC
53	NC	52	NC
55	NC	54	NC
57	GND	56	NC
59	NC	58	NC
61	NC	60	NC
63	NC	62	NC
65	NC	64	NC
67	NC	66	NC
69	NC	68	NC
71	GND	70	3.3V
73	GND	72	3.3V
75	NC	74	3.3V

