



2024-01-30

	1	2	3	4	5	6	
A	AFW-QCA206x-0Wxx Modules				AFW-QCA206x-5Wxx Modules		
	FUNCTION	I/O	PAD NAME	PAD #	PAD NAME	I/O	FUNCTION
	Ground	GND		1	GND		Ground
	3.3V main power supply input	3V3_E	I	2	3V3_E	I	3.3V main power supply input
	No Connection	NC		3	USB_DP		USB Differential Signal Positive
	3.3V main power supply input	3V3_E	I	4	3V3_E	I	3.3V Power supply input
	No Connection	NC		5	USB_DM		USB Differential Signal Negative
	WiFi LED	WL_LED	O	6	WL_LED	O	WiFi LED
	Ground	GND		7	GND		Ground
	PCM Clock	PCM_CLK	GPIO_7	8	GPIO_7	BT_I2S_SCK	SLIMbus
	No Connection	NC		9	NC		No Connection
	PCM SYNC	PCM_SYNC	GPIO_6	10	GPIO_6	BT_I2S_WS	SLIMbus
B	No Connection	NC		11	NC		No Connection
	PCM OUT	PCM_OUT	GPIO_5	12	GPIO_5	BT_I2S_SDO	
	No Connection	NC		13	NC		No Connection
	PCM IN	PCM_IN	GPIO_4	14	GPIO_4	BT_I2S_SDI	
	No Connection	NC		15	NC		No Connection
	Reserved for BT LED or I2C CLK	Reserved	GPIO_13	16	GPIO_13	BT_LED	Operates the Bluetooth LED
	No Connection	NC		17	NC		No Connection
	Ground	GND		18	GND		Ground
	No Connection	NC		19	NC		No Connection
	Host Bluetooth Wake	BT_WAKEUP_HOST	GPIO_9	20	GPIO_9	BT_WAKEUP_HOST	Host Bluetooth Wake
	No Connection	NC		21	NC		No Connection
	Bluetooth UART Transmit Data	BT_UART_TXD		22	GPIO_1	NC	No Connection
	No Connection	NC		23	NC		No Connection
	Bluetooth UART Receive Data	BT_UART_RXD		32	GPIO_0	NC	No Connection
	Ground	GND		33	GND		Ground
	Bluetooth UART Request To Send	BT_UART_RTS	O	34	GPIO_3	NC	No Connection
	PCIE Receiving Positive	PCIE_RXP	I	35	I	PCIE_RXP	PCIE Receiving Positive
	Bluetooth UART Clear To Send	BT_UART_CTS	I	36	GPIO_2	NC	No Connection
	PCIE Receiving Negative	PCIE_RXN	I	37	I	PCIE_RXN	PCIE Receiving Negative
	JTAG System Reset signal. Active Low	SRST_N		38		SRST_N	JTAG System Reset signal. Active Low
C	Ground	GND		39	GND		Ground
	WLAN Host UART Wake	WL_WAKE_HOST	GPIO_49	40	GPIO_49	Reserved	Reserved for WL WAKE HOST or WL SEN UART RXD
	PCIE Transmitting Positive	PCIE_TXP	O	41	O	PCIE_TXP	PCIE Transmitting Positive
D							
E							

PART NUMBER		DESCRIPTION						
AXW-QCA206X-XXXX		AXW-QCA206X-XXXX E20 Series W, M.2 E-KEY Pin map						
AEBPO-190003-03								
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DRAWING NUMBER	FINISH by	APVD by	MATERIAL by	UNITS in	DIMENSION	SIZE	SCALE	SHEET
AEBPO-190003-03	Andy	LT		mm	1PCL ±0.5	A4	1:1	2 OF 3
RELEASE	Zone	NOTES			DRAWN	CHECKED	DATE	
1	1	Initial Release			NM	LT	2023-02-08	
2	1	Separation of AFW-QCA206x-0 and AFW-QC206x-5			SC	LT	2023-05-22	
3	1	Described reserved pins			SC	LT	2024-01-30	

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	1	2	3	4	5	6			
A	AFW-QCA206x-0Wxx Modules			AFW-QCA206x-5Wxx Modules			A		
	FUNCTION	PAD NAME	I/O	PAD #	I/O	PAD NAME		FUNCTION	
	No Connection	NC		42		NC		No Connection	
	PCIE Transmitting Negative	PCIE_TXN	O	43	O	PCIE_TXN		PCIE Transmitting Negative	
	No Connection	NC		44		NC		No Connection	
	Ground	GND		45		GND		Ground	
	Reserved for LAA COEX TXD	Reserved	GPIO_11	46	GPIO_11	LTE_COEX_TXD		LTE Coex Transmit	
	PCIE Reference Clock Positive	PCIE_REFCLK_P	I	47	I	PCIE_REFCLK_P		PCIE Reference Clock Positive	
	Host Bluetooth Wake	HOST_WAKEUP_BT	GPIO_10	48	GPIO_10	LTE_COEX_RXD		LTE Coex Receive	
	PCIE Reference Clock Negative	PCIE_REFCLK_N	I	49	I	PCIE_REFCLK_N		PCIE Reference Clock Negative	
	External 32.768 KHz sleep clock input	SLEEP_CLK	GPIO_14	50	GPIO_14	SLEEP_CLK		External 32.768 KHz sleep clock input	
	Ground	GND		51		GND		Ground	
	PCIE reset signal. Internal pull up 3.3V power domain.	PCIE_RST_L	I	52	I	PCIE_RST_L		PCIE reset signal. Internal pull up 3.3 V power domain.	
	Wi-Fi PCIE Clock Request Low Active. Pull up 3.3V power domain.	PCIE_CLKREQ_L	O	53	O	PCIE_CLKREQ_L		Wi-Fi PCIE Clock Request Low Active. Pull up 3.3V power domain.	
	Active high to enable Wi-Fi. Pull up 3.3 V power domain.	WL_EN	I	54	I	WL_EN		Active high to enable Wi-Fi. Pull up 3.3 V power domain.	
	Wi-Fi PCIE Wake up signal. Internal pull up 3.3V power domain.	PCIE_WAKE_L	O	55	O	PCIE_WAKE_L		Wi-Fi PCIE Wake up signal. Internal pull up 3.3V power domain.	
	Active high to enable Bluetooth. Pull up 3.3V power domain.	BT_EN	I	56	I	BT_EN		Active high to enable Bluetooth. Pull up 3.3V power domain.	
	Ground	GND		57		GND		Ground	
	B	Wi-Fi Debug UART Transmit	WL_DBG_UART_TXD	GPIO_44	58	GPIO_44		WL_DBG_UART_TXD	Wi-Fi Debug UART Transmit
		No Connection	NC		59			NC	No Connection
Wi-Fi Debug UART Receive		WL_DBG_UART_RXD	GPIO_45	60	GPIO_45	WL_DBG_UART_RXD	Wi-Fi Debug UART Receive		
No Connection		NC		61		NC	No Connection		
Reserved for LAA TX EN		Reserved	GPIO_40	62	GPIO_40	LAA_TX_EN	LTE license assisted access transmitting enable. When high the 5GHz receiver is in a protected state.		
Ground		GND		63		GND	Ground		
Reserved for WL TXEN LAA		Reserved	GPIO_41	64	GPIO_41	WL_TX_EN	Wireless Lan transmitting enable. When high, the LAA receiver is placed in a protected state.		
BT Debug UART Receive		BT_DB_UART_RXD	GPIO_12	65	GPIO_12	Reserved	Reserved for I2C DATA		
JTAG TMS Signal		JTAG_TMS	I	66	I	JTAG_TMS	JTAG TMS Signal		
BT Debug UART Transmit		BT_DB_UART_TXD	GPIO_13	67	GPIO_13	Reserved	Reserved for I2C CLK		
C	JTAG TCK Signal	JTAG_TCK	I	68	I	JTAG_TCK	JTAG TCK Signal		
	Ground	GND		69		GND	Ground		
	JTAG TDO Signal	JTAG_TDO	O	70	O	JTAG_TDO	JTAG TDO Signal		
	JTAG TRST Signal	JTAG_TRST	I	71	I	JTAG_TRST	JTAG TRST Signal		
	3.3V main power supply input	3V3_E	I	72	I	3V3_E	3.3V main power supply input		
	JTAG TDI Signal	JTAG_TDI	O	73	O	JTAG_TDI	JTAG TDI Signal		
	3.3V main power supply input	3V3_E	I	74	I	3V3_E	3.3V main power supply input		
	Ground	GND		75		GND	Ground		
D									
E									

PART NUMBER		DESCRIPTION		TECH DESIGN VOXMICRO www.voxmicro.com - www.voxmicro.tel				
AXW-QCA206X-XXXX		AXW-QCA206X-XXXX E20 Series W, M.2 E-KEY						
AEBPO-190003-03		Pin Descriptions						
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AEBPO-190003- 03	Andy	LT		mm	1PCL ±0.5	A4	1:1	2 OF 2
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