Black Oak Engineering

BlueJay Signal Table

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BlueJay PIC32MZ MultiBoard
ver 1.2
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'_n' means asserted low.   MISO = Micro In, Serial Device Out
Polarity is with respect to BlueJay.   MOSI = Micro Out, Serial Device In

Cyannocita cristata

PIC32MZ pin #	BlueJay name, primary functionality	Complete functionality	Header pin	5 V tolerant	Ethernet name	Ethernet function	Polarity	RMII	Arduino	Pin #	MikroBus	Pin #	JTAG & Trace	JTAG H5 Pin #	EBI	PMP
															Parallel Interfaces	
1	GioG15	AN23/AERXERR/RG15	H5.2													
2	GioA5	EBIA5/AN34/PMA5/RA5	H5.3												EBIA5	PMA5
3	GioE5	EBID5/AN17/RPE5/PMD5/RE5	H5.4												EBID5	PMD5
4	GioE6	EBID6/AN16/PMD6/RE6	H5.5												EBID6	PMD6
5	GioE7	EBID7/AN15/PMD7/RE7	H5.6												EBID7	PMD7
6	GioC1	EBIA6/AN22/RPC1/PMA6/RC1	H5.7												EBIA6	PMA6
7	GioC2	EBIA12/AN21/RPC2/PMA12/RC2	H5.8												EBIA12	PMA12
8	GioC3	EBIWE/AN20/RPC3/PMWR/RC3	H4.1												EBIWE	PMWR
9	GioC4	EBIOE/AN19/RPC4/PMRD/RC4	H4.2												EBIOE	PMRD
10	GioG6	AN14/C1IND/ECOL/RPG6/SCK2/RG6	H4.3		ECOL	Collision Detect	i	No								
11	GioG7	EBIA4/AN13/C1INC/ECRS/RPG7/SDA4/PMA4/RG7	H4.4		ECRS	Carrier Sense	i	No							EBIA4	PMA4
12	GioG8	EBIA3/AN12/C2IND/ERXDV/AERXDV/AECRSDV/RPG8/SCL4/PMA3/RG8	H4.5		ERXDV	Receive Data Valid	i	No							EBIA3	PMA3
15	MCLR_n												MCLR_n	10		
16	GioG9	EBIA2/AN11/C2INC/ERXCLK/EREFCLK/AERXCLK/AEREFCLK/RPG9/PMA2/RG9	H4.6		ERXCLK	Receive Clock	i	No							EBIA2	PMA2
17	GioA0	TMS/EBIA16/AN24/RA0	H4.7										JTAG_TMS	2	EBIA16	
18	GioE8	AN25/AERXD0/RPE8/RE8	H2.2													
19	GioE9	AN26/AERXD1/RPE9/RE9	H2.3													
20	GioB5	AN45/C1INA/RPB5/RB5	H2.4													
	Low Noise Analog															
21	Gan4	AN4/C1INB/RB4	H3.6													
22	Gan3	AN3/C2INA/RPB3/RB3	H3.5						PC3/A3	17						
23	Gan2	AN2/C2INB/RPB2/RB2	H3.4						PC2/A2	16						
24	Gan1	PGEC1/AN1/RPB1/RB1	H3.3						PC1/A1	15						
25	Gan0	PGED1/AN0/RPB0/RB0	H3.2						PC0/A0	14	AN	1				
26	PGEC2	PGEC2/AN46/RPB6/RB6	ICSP.5													
27	PGED2	PGED2/AN47/RPB7/RB7	ICSP.4													
28	AGnd	VREF-/CVREF-/AN27/AERXD2/RA9	H3.1													
29	Vref+ = 3.0 Vref	VREF+/CVREF+/AN28/AERXD3/RA10	H3.8													
32	GioB8	EBIA10/AN48/RPB8/PMA10/RB8	H2.5												EBIA10	PMA10
33	GioB9	EBIA7/AN49/RPB9/PMA7/RB9	H2.6												EBIA7	PMA7
34	BattHalfV/GioB10	EBIA13/CVREFOUT/AN5/RPB10/PMA13/RB10	H3.7												EBIA13	PMA13
35	GioB11	AN6/ERXERR/AETXERR/RB11	H2.7		ERXERR	Receive Error	i	Yes								
38	GioA1	TCK/EBIA19/AN29/RA1	H2.8										JTAG_TCK	4	EBIA19	
39	GioF13	TDI/EBIA18/AN30/RPF13/SCK5/RF13	H12.1										JTAG_TDI	8	EBIA18	
40	GioF12	TDO/EBIA17/AN31/RPF12/RF12	H12.2						PD2/Int0	2			JTAG_TDO	6	EBIA17	

Pin	Signal	Function	Header		Eth	Description	I/O	Int	Pin2	#	Label	#			EBI	PM
41	GioB12	EBIA11/AN7/ERXD0/AECRS/PMA11/RB12	H12.3		ERXD0	Receive Data 0	i	Yes	PD3/Int1	*3*					EBIA11	PMA11
42	GioB13	AN8/ERXD1/AECOL/RB13	H12.4		ERXD1	Receive Data 1	i	Yes	PD4	*4*						
43	GioB14	EBIA1/AN9/ERXD2/AETXD3/RPB14/SCK3/PMA1/RB14	H12.5		ERXD2	Receive Data 2	i	No	PD5	*5*					EBIA1	PMA1
44	GioB15	EBIA0/AN10/ERXD3/AETXD2/RPB15/OCFB/PMA0/RB15	H12.6		ERXD3	Receive Data 3	i	No	PD6	*6*					EBIA0	PMA0
47	GioD14	AN32/AETXD0/RPD14/RD14	H12.7						PD7	*7*						
48	GioD15	AN33/AETXD1/RPD15/SCK6/RD15	H12.8						PB0	*8*						
49	24MHz Osc															
50	BattCheck	OSC2/CLKO/RC15														
51	Vbus	External USB 5V		Yes												
52	Vusb3V3															
54	D-															
55	D+															
56	GioF3	RPF3/USBID/RF3	H11.7						PB1	*9*						
57	GioF2	EBIRDY3/RPF2/SDA3/RF2*	H11.6	Yes					PB2/SPI_CS_n	*10*					EBIRDY3	
58	GioF8	EBIRDY2/RPF8/SCL3/RF8*	H11.5	Yes											EBIRDY2	
59	GioA2	EBICS0/SCL2/RA2*	H11.4	Yes											EBICS0	
60	GioA3	EBIRDY1/SDA2/RA3*	H11.3	Yes											EBIRDY1	
61	GioA4	EBIA14/PMCS1/PMA14/RA4*	H11.2	Yes											EBIA14	PMA14
64	UA1_RxD	EBIA9/RPF4/SDA5/PMA9/RF4*	H8.3, H10.6	Yes					PD1/TxOut	*1*	Tx	13			EBIA9	PMA9
65	UA1_TxD	EBIA8/RPF5/SCL5/PMA8/RF5*	H8.2, H10.5	Yes					PD0/RxIn	*0*	Rx	14			EBIA8	PMA8
66	IIC1_SCL	AETXCLK/RPA14/SCL1/RA14*	H10.4	Yes					PC5/A5/SCL	*19*	SCL	12				
67	IIC1_SDA	AETXEN/RPA15/SDA1/RA15*	H10.3	Yes					PC4/A4/SDA	*18*	SDA	11				
68	GioD9	EBIA15/RPD9/PMCS2/PMA15/RD9*	H10.2	Yes											EBIA15	PMA15
69	GioD10	RPD10/SCK4/RD10* TestLED	H10.1	Yes												
70	GioD11	EMDC/AEMDC/RPD11/RD11*	H9.8	Yes	EMDC	Ethernet Management Data Clock	o	No								
71	GioD0	EMDIO/AEMDIO/RPD0/RTCC/INT0/RD0*	H9.7	Yes	EMDIO	Ethernet Management Data	io	Yes								
72	CLK_32KHz	SOSCI/RPC13/RC13	*H9.6*													
73	GioC14	SOSCO/RPC14/T1CK/RC14	*H9.5*													
76	SPI1_SCK	RPD1/SCK1/RD1*	H9.4	Yes					PB5/SPI_SCK	*13*	SCK	4				
77	SPI1_MISO	EBID14/ETXEN/RPD2/PMD14/RD2*	H9.3	Yes	EMXEN	Transmit Enable	o	Yes	PB4/SPI_MISO	*12*	MISO	5			EBID14	PMD14
78	SPI1_MOSI	EBID15/ETXCLK/RPD3/PMD15/RD3*	H9.2	Yes	ETXCLK	Transmit Clock	o	No	PB3/SPI_MOSI	*11*	MOSI	6			EBID15	PMD15
79	GioD12	EBID12/ETXD2/RPD12/PMD12/RD12*	H7.7	Yes	ETXD2	Transmit Data 2	o	No			RST	2			EBID12	PMD12
80	GioD13	EBID13/ETXD3/PMD13/RD13*	H7.6	Yes	ETXD3	Transmit Data 3	o	No			CS	3			EBID13	PMD13
81	SQI_CS0_n	SQICS0/RPD4/RD4*		Yes												
82	GioD5	SQICS1/RPD5/RD5*	H7.5	Yes							INT	15				
85	GioF0	EBID11/ETXD1/RPF0/PMD11/RF0*	H7.4	Yes											EBID11	PMD11
86	GioF1	EBID10/ETXD0/RPF1/PMD10/RF1*	H7.3	Yes											EBID10	PMD10
87	GioG1	EBID9/ETXERR/RPG1/PMD9/RG1*	H7.2	Yes											EBID9	PMD9
88	GioG0	EBID8/RPG0/PMD8/RG0*	H7.1	Yes											EBID8	PMD8
89	SQI_CLK	TRCLK/SQICLK/RA6*		Yes												
90	SQI_D3	TRD3/SQID3/RA7*		Yes												
91	GioE0	EBID0/PMD0/RE0*	H6.6	Yes							PWM	16			EBID0	PMD0
94	GioE1	EBID1/PMD1/RE1*	H6.5	Yes											EBID1	PMD1
95	SQI_D2	TRD2/SQID2/RG14*		Yes												
96	SQI_D1	TRD1/SQID1/RG12*		Yes												
97	SQI_D0	TRD0/SQID0/RG13*		Yes												

98	GioE2	EBID2/PMD2/RE2*	**H6.4**	Yes													EBID2	PMD2
99	GioE3	EBID3/RPE3/PMD3/RE3*	**H6.3**	Yes													EBID3	PMD3
100	GioE4	EBID4/AN18/PMD4/RE4	**H6.2**						PC4/Reset	X1							EBID4	PMD4