

LENGTH	TOLERANCE
<2M	+5CM/-0CM
2 TO 5M	+10CM/-0CM
>5M	+15CM/-0CM

REF DES/ITEM	DESCRIPTION
P1,P2,P3,P4,P5	HIROSE IX INDUSTRIAL (OR OTHER IEC 61076-3-124) CONNECTOR, FEMALE, TYPE B
P6	37-POSITION HIGH-DENSITY DSUB, MALE
1	#4-40 UNC THUMBSCREWS, METAL, SLOTTED AND KNURLED

ITEM	CONSTRUCTION	CONDUCTORS	INSULATION	JACKET
2	4 SHIELDED TWISTED PAIRS, WITH OVERALL SHIELD	30 AWG TINNED STRANDED COPPER (7/0.10MM, 0.30MM OD)	0.15MM THICK SRPVC, 0.6MM OD	0.76MM THICK PVC, 5.50MM OD

² PRODUCT AND COMPANY NAMES MENTIONED ARE TRADEMARKS OR TRADE NAMES OF THEIR RESPECTIVE COMPANIES.

1. REFER TO PRODUCT MANUAL ON NI.COM FOR MORE DETAILS.

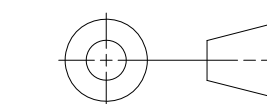
NOTES: UNLESS OTHERWISE SPECIFIED.

METRIC

CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS AND [INCHES]
DO NOT SCALE DRAWING
THIRD ANGLE PROJECTION

NI.COM AUSTIN, TEXAS	
TITLE SHDB37M-5IXBF ARINC 429	
SIZE D 7U296	CODE IDENT NO. MM/DD/YYYY 08/22/2023
SCALE: 1/1	SHEET 1 OF 2



WIRE LIST

LEAD DESCRIPTION	PAIR	P6 (DB37)	REFERENCE - AIM SCSI 68 PIN (DB37#1)	REFERENCE - AIM SCSI 68 PIN (DB37#2)	SIGNAL - ARINC-429 32CH. (CONN1)	SIGNAL - ARINC-429 32CH. (CONN2)	SIGNAL - ARINC-429 4CH. DOWNWARD COMPATIBILITY MODE	SIGNAL - ARINC-429 8CH. DOWNWARD COMPATIBILITY MODE	SIGNAL - ARINC-429 16CH. DOWNWARD COMPATIBILITY MODE	SIGNAL NAME - IX	COND.	COLOR	P1	P2	P3	P4	P5	NOTES		
LEAD 1 (TX/RX)	0	1	1	19	TXRX_A_1	TXRX_A_17	TX CH. 1 (TRUE)	TX CH. 1 (TRUE)	TXRX CH. 1 (TRUE)	A	C0	RED	1							
		20	35	53	TXRX_B_1	TXRX_B_17	TX CH. 1 (COMPL.)	TX CH. 1 (COMPL.)	TXRX CH. 1 (COMPL.)	B	C1	WHITE	2							
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_0	SHIELD/DRAIN	SHELL							
	1	2	2	20	TXRX_A_2	TXRX_A_18	TX CH. 2 (TRUE)	TX CH. 2 (TRUE)	TXRX CH. 2 (TRUE)	C	C2	BROWN	4							
		21	36	54	TXRX_B_2	TXRX_B_18	TX CH. 2 (COMPL.)	TX CH. 2 (COMPL.)	TXRX CH. 2 (COMPL.)	D	C3	WHITE	5							
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_1	SHIELD/DRAIN	SHELL							
	2	3	3	21	TXRX_A_3	TXRX_A_19	TX CH. 3 (TRUE)	TX CH. 3 (TRUE)	TXRX CH. 3 (TRUE)	E	C4	ORANGE	6							
		22	37	55	TXRX_B_3	TXRX_B_19	TX CH. 3 (COMPL.)	TX CH. 3 (COMPL.)	TXRX CH. 3 (COMPL.)	F	C5	WHITE	7							
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_2	SHIELD/DRAIN	SHELL							
	3	4	4	22	TXRX_A_4	TXRX_A_20	TX CH. 4 (TRUE)	TX CH. 4 (TRUE)	TXRX CH. 4 (TRUE)	G	C6	YELLOW	9							
		23	38	56	TXRX_B_4	TXRX_B_20	TX CH. 4 (COMPL.)	TX CH. 4 (COMPL.)	TXRX CH. 4 (COMPL.)	H	C7	WHITE	10							
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_3	SHIELD/DRAIN	SHELL							
	N/A		SHELL	SHELL						CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							
LEAD 2 (TX/RX)	0	5	5	23	TXRX_A_5	TXRX_A_21	RESERVED	TX CH. 5 (TRUE)	TXRX CH. 5 (TRUE)	A	C8	RED		1						
		24	39	57	TXRX_B_5	TXRX_B_21	RESERVED	TX CH. 5 (COMPL.)	TXRX CH. 5 (COMPL.)	B	C9	WHITE		2						
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_4	SHIELD/DRAIN	SHELL							
	1	6	6	24	TXRX_A_6	TXRX_A_22	RESERVED	TX CH. 6 (TRUE)	TXRX CH. 6 (TRUE)	C	C10	BROWN		4						
		25	40	58	TXRX_B_6	TXRX_B_22	RESERVED	TX CH. 6 (COMPL.)	TXRX CH. 6 (COMPL.)	D	C11	WHITE		5						
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_5	SHIELD/DRAIN	SHELL							
	2	7	7	25	TXRX_A_7	TXRX_A_23	RESERVED	TX CH. 7 (TRUE)	TXRX CH. 7 (TRUE)	E	C12	ORANGE		6						
		26	41	59	TXRX_B_7	TXRX_B_23	RESERVED	TX CH. 7 (COMPL.)	TXRX CH. 7 (COMPL.)	F	C13	WHITE		7						
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_6	SHIELD/DRAIN	SHELL							
	3	8	8	26	TXRX_A_8	TXRX_A_24	RESERVED	TX CH. 8 (TRUE)	TXRX CH. 8 (TRUE)	G	C14	YELLOW		9						
		27	42	60	TXRX_B_8	TXRX_B_24	RESERVED	TX CH. 8 (COMPL.)	TXRX CH. 8 (COMPL.)	H	C15	WHITE		10						
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_7	SHIELD/DRAIN	SHELL							
	N/A		SHELL	SHELL						CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							
LEAD 3 (TX/RX)	0	12	9	30	TXRX_A_9	TXRX_A_25	RX CH. 1 (TRUE)	RX CH. 1 (TRUE)	TXRX CH. 9 (TRUE)	A	C16	RED			1					
		30	43	64	TXRX_B_9	TXRX_B_25	RX CH. 1 (COMPL.)	RX CH. 1 (COMPL.)	TXRX CH. 9 (COMPL.)	B	C17	WHITE			2					
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_8	SHIELD/DRAIN	SHELL							
	1	13	10	31	TXRX_A_10	TXRX_A_26	RX CH. 2 (TRUE)	RX CH. 2 (TRUE)	TXRX CH. 10 (TRUE)	C	C18	BROWN			4					
		31	44	65	TXRX_B_10	TXRX_B_26	RX CH. 2 (COMPL.)	RX CH. 2 (COMPL.)	TXRX CH. 10 (COMPL.)	D	C19	WHITE			5					
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_9	SHIELD/DRAIN	SHELL							
	2	14	11	32	TXRX_A_11	TXRX_A_27	RX CH. 3 (TRUE)	RX CH. 3 (TRUE)	TXRX CH. 11 (TRUE)	E	C20	ORANGE			6					
		32	45	66	TXRX_B_11	TXRX_B_27	RX CH. 3 (COMPL.)	RX CH. 3 (COMPL.)	TXRX CH. 11 (COMPL.)	F	C21	WHITE			7					
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_10	SHIELD/DRAIN	SHELL							
	3	15	12	33	TXRX_A_12	TXRX_A_28	RX CH. 4 (TRUE)	RX CH. 4 (TRUE)	TXRX CH. 12 (TRUE)	G	C22	YELLOW			9					
		33	46	67	TXRX_B_12	TXRX_B_28	RX CH. 4 (COMPL.)	RX CH. 4 (COMPL.)	TXRX CH. 12 (COMPL.)	H	C23	WHITE			10					
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_11	SHIELD/DRAIN	SHELL							
	N/A		SHELL	SHELL						CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							
LEAD 4 (TX/RX)	0	16	13	27	TXRX_A_13	TXRX_A_29	RESERVED	RX CH. 5 (TRUE)	TXRX CH. 13 (TRUE)	A	C24	RED					1			
		34	47	61	TXRX_B_13	TXRX_B_29	RESERVED	RX CH. 5 (COMPL.)	TXRX CH. 13 (COMPL.)	B	C25	WHITE					2			
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_12	SHIELD/DRAIN	SHELL							
	1	17	14	17	TXRX_A_14	TXRX_A_30	RESERVED	RX CH. 6 (TRUE)	TXRX CH. 14 (TRUE)	C	C26	BROWN					4			
		35	48	51	TXRX_B_14	TXRX_B_30	RESERVED	RX CH. 6 (COMPL.)	TXRX CH. 14 (COMPL.)	D	C27	WHITE					5			
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_13	SHIELD/DRAIN	SHELL							
	2	18	15	18	TXRX_A_15	TXRX_A_31	RESERVED	RX CH. 7 (TRUE)	TXRX CH. 15 (TRUE)	E	C28	ORANGE					6			
		36	49	52	TXRX_B_15	TXRX_B_31	RESERVED	RX CH. 7 (COMPL.)	TXRX CH. 15 (COMPL.)	F	C29	WHITE					7			
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_14	SHIELD/DRAIN	SHELL							
	3	19	16	34	TXRX_A_16	TXRX_A_32	RESERVED	RX CH. 8 (TRUE)	TXRX CH. 16 (TRUE)	G	C30	YELLOW					9			
		37	50	68	TXRX_B_16	TXRX_B_32	RESERVED	RX CH. 8 (COMPL.)	TXRX CH. 16 (COMPL.)	H	C31	WHITE					10			
		10	28	GND	GND	GND	GND	GND	GND	CHSGND	SHIELD_15	SHIELD/DRAIN	SHELL							
	N/A		SHELL	SHELL						CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							
LEAD 5 (TRIG, IRIG)	0	9	N/A	N/A	TRIGGER IN	NC	TRIG IN 0	TRIG IN 0	TRIG IN 0	A	C32	RED						1		
		10	N/A	N/A	GND	GND	GND	GND	GND	I (REF)	C33	WHITE						3		
		10	N/A	N/A	GND	GND	GND	GND	GND	CHSGND	SHIELD_16	SHIELD/DRAIN	SHELL							
	1	11	N/A	N/A	TRIGGER OUT	NC	TRIG OUT 0	TRIG OUT 0	TRIG OUT 0	B	C34	BROWN						2		
		10	N/A	N/A	GND	NC	N/A	GND	GND	I (REF)	C35	WHITE						3		
		10	N/A	N/A	GND	GND	GND	GND	GND	CHSGND	SHIELD_17	SHIELD/DRAIN	SHELL							
	2	28	N/A	N/A	IRIG-OUT	NC	IRIG-OUT	IRIG-OUT	IRIG-OUT	C	C36	ORANGE						4		
		10	N/A	N/A	GND	NC	NC	GND	GND	I (REF)	C37	WHITE						3		
		10	N/A	N/A	GND	GND	GND	GND	GND	CHSGND	SHIELD_18	SHIELD/DRAIN	SHELL							
	3	29	N/A	N/A	IRIG-IN	NC	IRIG-IN	IRIG-IN	IRIG-IN	F	C38	YELLOW						7		
		10	N/A	N/A	GND	NC	NC	GND	GND	I (REF)	C39	WHITE						3		
		10	N/A	N/A	GND	GND	GND	GND	GND	CHSGND	SHIELD_19	SHIELD/DRAIN	SHELL							
	N/A		SHELL	SHELL						CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							