

Technical Reference Manual for the Pixel Array Control Monitor and Network (Pac-Man) Card

November 23, 2020

1 Signal Mapping

Logical	Trenz	Pin	Note
TILE6_POSI_0	B33_L7_P	JB2-12	EVAL
TILE6_POSI_1	B33_L7_N	JB2-14	EVAL
TILE6_POSI_2	B33_L8_P	JB2-16	EVAL
TILE6_POSI_3	B33_L8_N	JB2-18	EVAL
TILE6_PISO_0	B33_L11_P	JB2-22	EVAL
TILE6_PISO_1	B33_L11_N	JB2-24	EVAL
TILE6_PISO_2	B33_L12_P	JB2-26	EVAL
TILE6_PISO_3	B33_L12_N	JB2-28	EVAL
TILE7_POSI_0	B33_L17_P	JB2-32	
TILE7_POSI_1	B33_L17_N	JB2-34	
TILE7_POSI_2	B33_L18_P	JB2-36	
TILE7_POSI_3	B33_L18_N	JB2-38	
TILE7_PISO_0	B13_L7_P	JB2-42	
TILE7_PISO_1	B13_L7_N	JB2-44	
TILE7_PISO_2	B13_L8_P	JB2-46	
TILE7_PISO_3	B13_L8_N	JB2-48	
TILE4_POSI_0	B13_L11_P	JB2-52	
TILE4_POSI_1	B13_L11_N	JB2-54	
TILE4_POSI_2	B13_L9_P	JB2-56	
TILE4_POSI_3	B13_L9_N	JB2-58	
TILE4_PISO_0	B13_L20_P	JB2-62	
TILE4_PISO_1	B13_L20_N	JB2-64	
TILE4_PISO_2	B13_L17_P	JB2-66	
TILE4_PISO_3	B13_L17_N	JB2-68	
TILE1_POSI_0	B13_L16_P	JB2-72	
TILE1_POSI_1	B13_L16_N	JB2-74	
TILE1_POSI_2	B13_L18_P	JB2-76	
TILE1_POSI_3	B13_L18_N	JB2-78	
TILE1_PISO_0	B13_L15_P	JB2-82	
TILE1_PISO_1	B13_L15_N	JB2-84	
TILE1_PISO_2	B13_L21_P	JB2-86	
TILE1_PISO_3	B13_L21_N	JB2-88	

Logical	Trenz	Pin	Note
TILE3_POSI_3	B33_L13_P	JB2-21	
TILE3_POSI_2	B33_L13_N	JB2-23	
TILE3_POSI_1	B33_L14_P	JB2-25	
TILE3_POSI_0	B33_L14_N	JB2-27	
TILE3_PISO_3	B13_L5_P	JB2-31	
TILE3_PISO_2	B13_L5_N	JB2-33	
TILE3_PISO_1	B13_L6_P	JB2-35	
TILE3_PISO_0	B13_L6_N	JB2-37	
TILE2_POSI_3	B13_L1_P	JB2-41	
TILE2_POSI_2	B13_L1_N	JB2-43	
TILE2_POSI_1	B13_L12_P	JB2-45	
TILE2_POSI_0	B13_L12_N	JB2-47	
TILE2_PISO_3	B13_L14_P	JB2-51	
TILE2_PISO_2	B13_L14_N	JB2-53	
TILE2_PISO_1	B13_L13_P	JB2-55	
TILE2_PISO_0	B13_L13_N	JB2-57	
TILE5_POSI_3	B13_L4_P	JB2-61	
TILE5_POSI_2	B13_L4_N	JB2-63	
TILE5_POSI_1	B13_L3_P	JB2-65	
TILE5_POSI_0	B13_L3_N	JB2-67	
TILE5_PISO_3	B13_L10_P	JB2-71	
TILE5_PISO_2	B13_L10_N	JB2-73	
TILE5_PISO_1	B13_L2_P	JB2-75	
TILE5_PISO_0	B13_L2_N	JB2-77	
TILE8_POSI_3	B13_L23_P	JB2-81	
TILE8_POSI_2	B13_L23_N	JB2-83	
TILE8_POSI_1	B13_L24_P	JB2-85	
TILE8_POSI_0	B13_L24_N	JB2-87	
TILE8_PISO_3	B13_L19_P	JB2-91	
TILE8_PISO_2	B13_L19_N	JB2-93	
TILE8_PISO_1	B13_L22_P	JB2-95	
TILE8_PISO_0	B13_L22_N	JB2-97	

Logical	Trenz	Pin	Note
TILE6_SYNC_DN	B35_L16_N	JB1-32	EVAL
TILE6_SYNC_DP	B35_L16_P	JB1-34	EVAL
TILE6_TRIG_DN	B35_L24_N	JB1-36	EVAL
TILE6_TRIG_DP	B35_L24_P	JB1-38	EVAL
TILE6_CLK_DN	B35_L18_N	JB1-42	EVAL
TILE6_CLK_DP	B35_L18_P	JB1-44	EVAL
TILE7_SYNC_DN	B35_L15_N	JB1-46	
TILE7_SYNC_DP	B35_L15_P	JB1-48	
TILE7_TRIG_DN	B35_L22_N	JB1-50	
TILE7_TRIG_DP	B35_L22_P	JB1-52	
TILE7_CLK_DN	B35_L17_N	JB1-56	
TILE7_CLK_DP	B35_L17_P	JB1-58	
TILE4_SYNC_DN	B35_L13_N	JB1-60	
TILE4_SYNC_DP	B35_L13_P	JB1-62	
TILE4_TRIG_DN	B35_L14_N	JB1-66	
TILE4_TRIG_DP	B35_L14_P	JB1-68	
TILE4_CLK_DN	B35_L4_N	JB1-70	
TILE4_CLK_DP	B35_L4_P	JB1-72	
TILE1_SYNC_DN	B35_L12_N	JB1-76	
TILE1_SYNC_DP	B35_L12_P	JB1-78	
TILE1_TRIG_DN	B35_L20_N	JB1-82	
TILE1_TRIG_DP	B35_L20_P	JB1-84	
TILE1_CLK_DN	B35_L19_N	JB1-97	non-contiguous
TILE1_CLK_DP	B35_L19_P	JB1-99	non-contiguous
TILE3_CLK_DN	B35_L10_N	JB1-35	
TILE3_CLK_DP	B35_L10_P	JB1-37	
TILE3_TRIG_DN	B35_L9_N	JB1-39	
TILE3_TRIG_DP	B35_L9_P	JB1-41	
TILE3_SYNC_DN	B35_L7_N	JB1-45	
TILE3_SYNC_DP	B35_L7_P	JB1-47	
TILE2_CLK_DN	B35_L2_N	JB1-49	
TILE2_CLK_DP	B35_L2_P	JB1-51	
TILE2_TRIG_DN	B35_L8_N	JB1-55	
TILE2_TRIG_DP	B35_L8_P	JB1-57	
TILE2_SYNC_DN	B35_L21_N	JB1-59	
TILE2_SYNC_DP	B35_L21_P	JB1-61	
TILE5_CLK_DN	B35_L11_N	JB1-65	
TILE5_CLK_DP	B35_L11_P	JB1-67	
TILE5_TRIG_DN	B35_L23_N	JB1-69	
TILE5_TRIG_DP	B35_L23_P	JB1-71	
TILE5_SYNC_DN	B35_L5_N	JB1-75	
TILE5_SYNC_DP	B35_L5_P	JB1-77	
TILE8_CLK_DN	B35_L3_N	JB1-79	
TILE8_CLK_DP	B35_L3_P	JB1-81	
TILE8_TRIG_DN	B35_L6_N	JB1-85	
TILE8_TRIG_DP	B35_L6_P	JB1-87	
TILE8_SYNC_DN	B35_L1_N	JB1-93	
TILE8_SYNC_DP	B35_L1_P	JB1-95	

Logical	Trenz	Pin	Note
TILE1_EN	B34_L1_P	JB3-7	
TILE4_EN	B34_L1_N	JB3-9	
TILE7_EN	B34_L18_P	JB3-13	
TILE6_EN	B34_L18_N	JB3-15	
TILE3_EN	B34_L20_P	JB3-19	
TILE2_EN	B34_L20_N	JB3-21	
TILE5_EN	B34_L10_P	JB3-25	
TILE8_EN	B34_L10_N	JB3-27	

Logical	Trenz	Package Pin
SCL-1	MIO10	
SDA-1	MIO11	
SCL-LOOPBACK	B34_L8_P	
SDA-LOOPBACK	B34_L8_N	
SCL-2	B34_L9_P	
SDA-2	B34_L9_N	
LED	MIO12	
LED	MIO13	
LED	B34_L22_P	
LED	B34_L22_N	
ANALOG_PWR_EN	B34_L2_P	JB3-14
TRIG_ISO	B34_L7_P	JB3-8
SYNC_ISO	B34_L7_N	JB3-10
CLK	TBD	
TRIG	TBD	
SYNC	TBD	