Neutron KU60 FPGA Development Board

Name	Signal Length (mm)	Total Pin/Package	Routed Length (mm)	Delay (ps)
CCLK	79.101	0	79.104	446.701
CLK_127_N	1.662	0	1.716	9.244
CLK_127_P	1.645	0	1.699	9.153
CLK_128_N	2.562	0	2.609	14.252
CLK_128_P	2.504	0	2.552	13.932
CLK_224_N	2.085	0	2.103	11.599
CLK_224_P	2.087	0	2.105	11.611
CLK_225_N	2.098	0	2.116	11.672
CLK_225_P	1.939	0	2.168	10.788
CLK_228_N	1.848	0	1.902	10.280
CLK_228_P	1.82	0	1.874	10.127
DATA0	189.971	0	189.971	1086.753
DATA1	189.971	0	189.978	1086.746
DATA2	189.971	0	189.962	1085.857
DATA3	189.997	0	190.005	1086.816
DATA4	189.967	0	189.979	1024.081
DATA5	189.967	0	189.979	1024.012
DATA6	189.967	0	189.959	1024.501
DATA7	189.984	0	189.972	1024.605
DATA8	189.938	0	189.94	1097.677
DATA9	189.938	0	189.938	1097.677
DATA10	189.938	0	189.938	1097.634
DATA11	189.938	0	189.938	1097.678
DATA12	189.938	0	189.938	1097.676
DATA13	190.25	0	190.267	1099.484
DATA14	189.938	0	189.938	1097.677
DATA15	190.345	0	190.345	1099.956
DDR4-A0	0	0	121.05	642.774
DDR4-A1	0	0	115.958	611.099
DDR4-A2	0	0	117.416	623.268
DDR4-A3	0	0	112.559	613.884
DDR4-A4	0	0	115.296	636.289
DDR4-A5	0	0	111.939	610.522
DDR4-A6	0	0	113.051	623.955
DDR4-A7	0	0	110.981	605.281
DDR4-A8	0	0	110.692	604.867
DDR4-A9	0	0	116.614	634.895
DDR4-A10	0	0	114.342	630.708
DDR4-A11	0	0	115.922	633.037
DDR4-A13	0	0	110.554	608.760
DDR4-ACT_n	0	0	115.334	605.993
DDR4-ALERT	0	0	135.785	731.827
DDR4-BA0	0	0	115.173	627.864

DDR4-BA1	0	0	111.304	618.852
DDR4-BC_n	0	0	111.969	591.387
DDR4-BG0	0	0	116.328	612.223
DDR4-CAS_n	0	0	111.494	619.450
DDR4-CKE	0	0	113.592	595.056
DDR4-CK_N	0	0	113.104	602.699
DDR4-CK_P	0	0	112.986	602.120
DDR4-CS_n	0	0	119.149	635.572
DDR4-DQ0	48.59	0	48.59	275.170
DDR4-DQ1	48.59	0	48.59	275.246
DDR4-DQ2	48.59	0	48.59	275.170
DDR4-DQ3	48.59	0	48.59	275.170
DDR4-DQ4	48.59	0	48.59	275.170
DDR4-DQ5	48.59	0	48.59	275.170
DDR4-DQ6	48.59	0	48.59	275.170
DDR4-DQ7	48.59	0	48.59	274.550
DDR4-DQ8	48.587	0	48.587	278.461
DDR4-DQ9	48.725	0	48.725	279.286
DDR4-DQ10	48.59	0	48.594	278.044
DDR4-DQ11	48.683	0	48.683	279.046
DDR4-DQ12	48.569	0	49.023	277.930
DDR4-DQ13	48.58	0	48.58	278.431
DDR4-DQ14	48.59	0	48.594	278.490
DDR4-DQ15	48.59	0	48.59	278.543
DDR4-DQ16	31.583	0	31.583	176.967
DDR4-DQ17	31.488	0	31.488	176.418
DDR4-DQ18	31.583	0	31.583	176.967
DDR4-DQ19	31.583	0	31.583	176.967
DDR4-DQ20	31.583	0	31.587	176.967
DDR4-DQ21	31.583	0	31.583	176.967
DDR4-DQ22	31.583	0	31.583	176.967
DDR4-DQ23	31.583	0	31.583	176.967
DDR4-DQ24	31.583	0	31.606	180.055
DDR4-DQ25	31.583	0	31.583	179.316
DDR4-DQ26	31.583	0	31.583	180.055
DDR4-DQ27	31.583	0	31.583	180.055
DDR4-DQ28	31.579	0	31.579	180.029
DDR4-DQ29	31.583	0	31.583	180.055
DDR4-DQ30	31.583	0	31.583	180.055
DDR4-DQ31	31.583	0	31.583	180.055
DDR4-DQ32	47.659	0	47.659	269.793
DDR4-DQ33	47.659	0	47.659	269.816
DDR4-DQ34	47.659	0	47.659	269.793
DDR4-DQ35	47.659	0	47.659	269.111
DDR4-DQ36	47.659	0	47.659	269.793
DDR4-DQ37	47.659	0	47.659	269.793
DDR4-DQ38	47.659	0	47.659	269.793

DDR4-DQ39	47.659	0	47.553	269.683
DDR4-DQ40	47.739	0	47.979	273.590
DDR4-DQ41	47.731	0	48.324	273.548
DDR4-DQ42	47.756	0	47.756	273.654
DDR4-DQ43	47.659	0	47.659	273.124
DDR4-DQ44	47.648	0	47.648	273.093
DDR4-DQ45	47.659	0	47.659	273.114
DDR4-DQ46	47.617	0	47.617	272.897
DDR4-DQ47	47.659	0	47.662	273.086
DDR4-DQ48	67.133	0	67.437	367.647
DDR4-DQ49	67.145	0	67.145	367.696
DDR4-DQ50	67.145	0	67.145	367.696
DDR4-DQ51	67.145	0	67.145	367.696
DDR4-DQ52	67.145	0	67.145	367.696
DDR4-DQ53	67.109	0	67.109	367.488
DDR4-DQ54	67.156	0	67.156	367.756
DDR4-DQ55	67.134	0	67.134	367.223
DDR4-DQ56	67.156	0	67.156	367.756
DDR4-DQ57	67.156	0	67.159	366.099
DDR4-DQ58	67.145	0	67.153	367.644
DDR4-DQ59	67.145	0	67.145	367.239
DDR4-DQ60	67.138	0	67.141	367.139
DDR4-DQ61	67.145	0	67.149	367.696
DDR4-DQ62	67.145	0	67.149	367.696
DDR4-DQ63	67.145	0	67.145	367.696
DDR4-DQ64	72.88	0	73.236	403.203
DDR4-DQ65	72.33	0	72.35	399.019
DDR4-DQ66	72.88	0	72.884	403.495
DDR4-DQ67	72.979	0	72.982	404.028
DDR4-DQ68	72.857	0	72.865	403.334
DDR4-DQ69	72.88	0	72.88	403.507
DDR4-DQ70	72.88	0	72.881	403.491
DDR4-DQ71	72.91	0	72.913	403.633
DDR4-ODT	0	0	116.938	650.057
DDR4-RAS_n	0	0	111.604	619.215
DDR4-RESET_n	0	0	117.75	621.532
DDR4-TEN	0	0	125.892	674.055
DDR4-WE_n	0	0	115.344	636.128
DDR4_DM0	48.59	0	48.59	275.170
DDR4_DM1	48.605	0	48.606	278.690
DDR4_DM2	32.115	0	32.115	180.041
DDR4_DM3	31.583	0	31.587	180.055
DDR4_DM4	47.659	0	47.659	269.816
DDR4_DM5	47.659	0	48.019	273.136
DDR4_DM6	67.145	0	67.145	367.694
DDR4_DM7	67.145	0	67.145	367.696
DDR4_DM8	72.881	0	72.882	403.443

DDR4_DQS0_N	48.59	0	48.592	269.812
DDR4_DQS0_P	48.59	0	48.592	269.812
DDR4_DQS1_N	48.59	0	48.59	279.613
DDR4_DQS1_P	48.59	0	48.59	279.613
DDR4_DQS2_N	31.583	0	31.583	174.186
DDR4_DQS2_P	31.583	0	31.583	174.186
DDR4_DQS3_N	31.583	0	31.903	177.374
DDR4_DQS3_P	31.583	0	31.583	177.374
DDR4_DQS4_N	47.669	0	47.669	270.690
DDR4_DQS4_P	47.669	0	47.669	270.690
DDR4_DQS5_N	47.669	0	47.669	274.263
DDR4_DQS5_P	47.669	0	47.669	274.263
DDR4_DQS6_N	67.126	0	67.126	368.626
DDR4_DQS6_P	67.126	0	67.126	368.626
DDR4_DQS7_N	67.134	0	67.134	368.57
DDR4_DQS7_P	67.134	0	67.134	368.57
DDR4_DQS8_N	72.878	0	72.878	370.607
DDR4_DQS8_P	72.878	0	72.878	370.607
DDR4_PAR	0	0	121.551	643.458
DDR4_REFCLK_N	0	0	28.224	143.039
DDR4_REFCLK_P	0	0	28.244	143.151
DDR_CLK_N	1.861	0	1.908	10.353
DDR_CLK_P	1.9	0	1.939	10.571
D_N	0	0	32.917	106.701
D_P	0	0	32.897	101.887
EEDATA	0	0	11.682	53.490
ETH_ACT	27.132	0	27.188	148.467
ETH_LED_MODE	0	0	5.123	17.597
ETH_LINK	32.568	0	32.568	178.216
ETH_MDC	120.88	0	120.885	678.704
ETH_MDIO	0	0	126.584	710.985
ETH_RST_OUT	123.318	0	123.318	701.463
ETH_RXD0	0	0	119.122	667.018
ETH_RXD1	0	0	119.138	667.107
ETH_RXD2	0	0	119.149	668.498
ETH_RXD3	0	0	119.149	668.468
ETH_RX_CLK	0	0	119.138	667.145
ETH_RX_CTL	0	0	119.138	667.075
ETH_TXCLK	116.042	0	116.053	660.572
ETH_TXD0	116.056	0	116.056	660.274
ETH_TXD1	116.042	0	116.06	660.717
ETH_TXD2	116.042	0	116.042	659.747
ETH_TXD3	116.042	0	116.044	660.005
ETH_TX_CTL	116.042	0	116.042	660.193
E\T\H_\R\S\T\	0	0	15.111	72.253
FABRIC_CLK_N	2.311	0	2.311	0.000
FABRIC_CLK_P	2.328	0	2.311	0.000

FABRIC_REFCLK_N	0	0	17.868	56.829
FABRIC_REFCLK_P	0	0	17.868	56.978
FAN_PWM	0	0	208.628	1192.921
FPGA_DATA0	44.662	0	44.662	246.830
FPGA_DATA1	44.628	0	44.644	246.278
FPGA_DATA2	44.662	0	44.662	246.025
FPGA_DATA3	44.673	0	44.673	246.849
FPGA_DATA4	44.649	0	44.662	246.554
FPGA_DATA5	44.566	0	44.577	245.971
FPGA_DATA6	44.561	0	44.558	246.013
FPGA_DATA7	44.674	0	44.662	246.666
GPHY_ATXRX_N	12.843	0	12.897	45.898
GPHY_ATXRX_P	12.841	0	12.863	44.861
GPHY_BTXRX_N	12.829		12.829	52.462
GPHY_BTXRX_P	12.823	0	12.823	52.547
GPHY_CTXRX_N	12.814	0	12.811	48.267
GPHY_CTXRX_P	12.811	0	13.251	44.953
GPHY_DTXRX_N	12.862	0	13.449	40.828
GPHY_DTXRX_P	12.861	0	13.518	40.792
HPC_CLK0_M2C_N	82.95	0	82.95	430.110
HPC_CLK0_M2C_P	82.95	0	82.95	430.111
HPC_CLK1_M2C_N	82.925	0	82.925	429.975
HPC_CLK1_M2C_P	82.925	0	82.925	429.975
HPC_CLK2_BIDIR_N	82.95	0	82.95	430.111
HPC_CLK2_BIDIR_P	82.95	0	82.95	430.110
HPC_CLK3_BIDIR_N	82.95	0	82.95	430.111
HPC_CLK3_BIDIR_P	82.95	0	82.95	430.110
HPC_DP0_C2M_N	70.768	0	70.768	393.628
HPC_DP0_C2M_P	70.642	0	70.642	392.898
HPC_DP0_M2C_N	62.603	0	62.603	340.820
HPC_DP0_M2C_P	62.603	0	62.603	340.820
HPC_DP1_C2M_N	70.692	0	70.692	393.189
HPC_DP1_C2M_P	70.692	0	70.692	393.189
HPC_DP1_M2C_N	62.563	0	62.563	340.587
HPC_DP1_M2C_P	62.633	0	62.633	340.996
HPC_DP2_C2M_N	70.767	0	70.767	393.620
HPC_DP2_C2M_P	70.767	0	70.767	393.620
HPC_DP2_M2C_N	62.556	0	62.564	340.548
HPC_DP2_M2C_P	62.556	0	62.954	340.548
HPC_DP3_C2M_N	70.488	0	70.494	391.926
HPC_DP3_C2M_P	70.488	0	70.488	392.007
HPC_DP3_M2C_N	62.556	0	62.556	340.548
HPC_DP3_M2C_P	62.556	0	62.556	340.548
HPC_DP4_C2M_N	81.473	0	81.473	455.503
HPC_DP4_C2M_P	81.473	0	81.473	455.503
HPC_DP4_M2C_N	39.951	0	39.985	199.932
HPC_DP4_M2C_P	39.903	0	39.92	192.370

HPC_DP5_C2M_N	81.408	0	81.408	455.132
HPC_DP5_C2M_P	81.408	0	81.408	455.131
HPC_DP5_M2C_N	39.951	0	39.951	209.547
HPC_DP5_M2C_P	39.951	0	39.951	209.547
HPC_DP6_C2M_N	81.415	0	82.422	455.169
HPC_DP6_C2M_P	81.415	0	81.421	455.169
HPC_DP6_M2C_N	39.951	0	39.988	201.514
HPC_DP6_M2C_P	39.931	0	39.971	191.966
HPC_DP7_C2M_N	81.449	0	81.791	455.367
HPC_DP7_C2M_P	81.449	0	81.879	455.367
HPC_DP7_M2C_N	39.901	0	39.951	201.267
HPC_DP7_M2C_P	39.886	0	39.926	191.933
HPC_GBTCLK0_M2C_C_N	12.696	0	12.658	56.291
HPC_GBTCLK0_M2C_C_P	12.696	0	12.658	56.291
HPC_GBTCLK0_M2C_N	42.113	0	42.123	228.620
HPC_GBTCLK0_M2C_P	42.197	0	42.197	229.085
HPC_GBTCLK1_M2C_C_N	12.865	0	12.827	57.222
HPC_GBTCLK1_M2C_C_P	12.865	0	12.827	57.222
HPC_GBTCLK1_M2C_N	42.415	0	42.377	228.894
HPC_GBTCLK1_M2C_P	42.415	0	42.377	228.991
HPC_HA00_CC_N	42.794	0	42.794	234.664
HPC_HA00_CC_P	42.794	0	42.794	234.664
HPC_HA01_CC_N	39.324	0	39.327	214.612
HPC_HA01_CC_P	39.324	0	39.324	214.612
HPC_HA02_N	63.437	0	63.437	353.978
HPC_HA02_P	63.437	0	63.437	353.978
HPC_HA03_N	58.058	0	58.073	319.870
HPC_HA03_P	58.051	0	58.066	319.831
HPC_HA04_N	39.974	0	39.974	218.369
HPC_HA04_P	39.956	0	39.956	218.265
HPC_HA05_N	39.325	0	39.325	214.614
HPC_HA05_P	39.325	0	39.325	214.614
HPC_HA06_N	85.511	0	85.511	479.963
HPC_HA06_P	85.511	0	85.504	479.963
HPC_HA07_N	76.396	0	76.396	427.837
HPC_HA07_P	76.396	0	76.396	427.837
HPC_HA08_N	45.182	0	45.171	248.468
HPC_HA08_P	45.173	0	45.168	248.417
HPC_HA09_N	39.456	0	39.456	215.372
HPC_HA09_P	39.456	0	39.456	215.372
HPC_HA10_N	54.165	0	54.165	300.390
HPC_HA10_P	54.165	0	54.165	300.390
HPC_HA11_N	58.544	0	58.544	325.699
HPC_HA11_P	58.544	0	58.544	325.699
HPC_HA12_N	42.398	0	42.398	232.377
HPC_HA12_P	42.398	0	42.398	232.377
HPC_HA13_N	40.665	0	40.665	222.363

HPC_HA13_P	40.665	0	40.665	222.363
HPC_HA14_N	50.522	0	50.522	279.331
HPC_HA14_P	50.522	0	50.522	279.331
HPC_HA15_N	47.211	0	47.211	260.194
HPC_HA15_P	47.211	0	47.211	260.194
HPC_HA16_N	41.059	0	41.059	224.636
HPC_HA16_P	41.059	0	41.059	224.636
HPC_HA17_CC_N	53.534	0	53.534	296.739
HPC_HA17_CC_P	53.541	0	53.541	296.781
HPC_HA18_N	60.688	0	60.688	338.088
HPC_HA18_P	60.687	0	60.683	338.081
HPC_HA19_N	48.44	0	48.44	267.298
HPC_HA19_P	48.44	0	48.44	267.298
HPC_HA20_N	46.429	0	46.429	255.673
HPC_HA20_P	46.429	0	46.429	255.674
HPC_HA21_N	63.927	0	63.927	356.811
HPC_HA21_P	63.927	0	63.927	356.811
HPC_HA22_N	67.639	0	67.639	378.266
HPC_HA22_P	67.639	0	67.639	378.266
HPC_HA23_N	75.686	0	75.687	424.773
HPC_HA23_P	75.686	0	75.686	424.773
HPC_HB00_CC_N	84.525	0	84.526	447.147
HPC_HB00_CC_P	84.525	0	84.526	447.147
HPC_HB01_N	77.237	0	77.237	421.806
HPC_HB01_P	77.237	0	77.238	421.808
HPC_HB02_N	58.692	0	58.692	314.603
HPC_HB02_P	58.692	0	58.692	314.603
HPC_HB03_N	64.97	0	64.97	350.894
HPC_HB03_P	64.97	0	64.97	350.894
HPC_HB04_N	56.097	0	56.097	299.601
HPC_HB04_P	56.097	0	56.097	299.601
HPC_HB05_N	56.319	0	56.319	300.881
HPC_HB05_P	56.319	0	56.319	300.881
HPC_HB06_CC_N	75.784	0	75.784	408.612
HPC_HB06_CC_P	75.784	0	75.784	408.612
HPC_HB07_N	62.637	0	62.637	337.405
HPC_HB07_P	62.616	0	62.616	337.284
HPC_HB08_N	59.391	0	59.391	318.639
HPC_HB08_P	59.391	0	59.389	318.639
HPC_HB09_N	54.395	0	54.395	289.762
HPC_HB09_P	54.395	0	54.393	289.762
HPC_HB10_N	97.052	0	97.073	535.181
HPC_HB10_P	97.039	0	97.06	535.104
HPC_HB11_N	87.389	0	87.389	480.492
HPC_HB11_P	87.373	0	87.389	478.715
HPC_HB12_N	59.893	0	59.893	321.543
HPC_HB12_P	59.893	0	59.893	321.543

HPC_HB13_N	56.179	0	56.21	300.075
HPC_HB13_P	56.179	0	56.194	300.075
HPC_HB14_N	70.124	0	70.124	380.687
HPC_HB14_P	70.124	0	70.129	380.687
HPC_HB15_N	63.6	0	63.605	333.785
HPC_HB15_P	63.6	0	63.6	333.833
HPC_HB16_N	69.7	0	69.7	378.236
HPC_HB16_P	69.7	0	69.701	378.236
HPC_HB17_CC_N	72.449	0	72.449	394.129
HPC_HB17_CC_P	72.449	0	72.449	394.129
HPC_HB18_N	76.779	0	76.779	419.160
HPC_HB18_P	76.779	0	76.779	419.160
HPC_HB19_N	64.754	0	64.754	349.641
HPC_HB19_P	64.754	0	64.755	349.641
HPC_HB20_N	77.714	0	77.714	424.564
HPC_HB20_P	77.694	0	77.694	424.449
HPC_HB21_N	72.654	0	72.654	395.313
HPC_HB21_P	72.634	0	72.634	395.198
HPC_LA00_CC_N	66.258	0	66.682	367.560
HPC_LA00_CC_P	66.258	0	66.682	367.560
HPC_LA01_CC_N	50.785	0	50.805	277.549
HPC_LA01_CC_P	50.785	0	50.785	271.605
HPC_LA02_N	80.537	0	80.552	448.408
HPC_LA02_P	80.537	0	80.544	450.094
HPC_LA03_N	59.908	0	59.908	325.707
HPC_LA03_P	59.908	0	59.915	319.883
HPC_LA04_N	88.968	0	88.968	498.831
HPC_LA04_P	88.968	0	88.996	498.831
HPC_LA05_N	58.486	0	58.488	322.632
HPC_LA05_P	58.486	0	58.486	322.632
HPC_LA06_N	50.274	0	50.274	275.166
HPC_LA06_P	50.264	0	50.264	275.105
HPC_LA07_N	102.592	0	102.592	577.583
HPC_LA07_P	102.592	0	102.592	577.583
HPC_LA08_N	60.135	0	60.135	327.761
HPC_LA08_P	60.135	0	60.135	325.410
HPC_LA09_N	54.595	0	55.029	300.141
HPC_LA09_P	54.621	0	55.132	300.290
HPC_LA10_N	53.022	0	53.022	291.051
HPC_LA10_P	53.022	0	53.029	291.051
HPC_LA11_N	129.678	0	129.669	734.146
HPC_LA11_P	129.654	0	129.644	734.006
HPC_LA12_N	57.733	0	57.733	318.278
HPC_LA12_P	57.733	0	57.722	318.278
HPC_LA13_N	57.686	0	58.099	318.009
HPC_LA13_P	57.686	0	58.014	318.009
HPC_LA14_N	64.21	0	64.21	355.717

HPC_LA14_P	64.21	0	64.199	355.717
HPC_LA15_N	119.65	0	119.65	676.184
HPC_LA15_P	119.65	0	119.65	676.184
HPC_LA16_N	63.622	0	63.612	352.322
HPC_LA16_P	63.622	0	63.613	352.322
HPC_LA17_CC_N	69.21	0	69.21	379.107
HPC_LA17_CC_P	69.21	0	69.213	379.107
HPC_LA18_CC_N	69.586	0	69.586	381.291
HPC_LA18_CC_P	69.963	0	69.963	383.475
HPC_LA19_N	88.796	0	88.799	492.618
HPC_LA19_P	88.796	0	88.796	492.618
HPC_LA20_N	85.793	0	85.793	475.214
HPC_LA20_P	85.832	0	85.832	475.442
HPC_LA21_N	117.228	0	117.228	657.389
HPC_LA21_P	117.228	0	117.228	657.389
HPC_LA22_N	100.093	0	100.093	558.085
HPC_LA22_P	100.103	0	100.103	558.146
HPC_LA23_N	76.409	0	76.748	420.831
HPC_LA23_P	76.409	0	76.748	420.831
HPC_LA24_N	69.463	0	69.453	380.579
HPC_LA24_P	69.463	0	69.453	380.579
HPC_LA25_N	129.485	0	129.485	728.422
HPC_LA25_P	129.485	0	129.485	728.422
HPC_LA26_N	67.092	0	67.092	366.835
HPC_LA26_P	67.079	0	67.079	366.758
HPC_LA27_N	66.854	0	66.277	359.633
HPC_LA27_P	66.854	0	66.642	359.633
HPC_LA28_N	67.344	0	67.344	368.299
HPC_LA28_P	67.345	0	67.345	368.299
HPC_LA29_N	68.023	0	68.023	372.230
HPC_LA29_P	68.023	0	68.023	372.230
HPC_LA30_N	71.837	0	71.837	394.332
HPC_LA30_P	71.826	0	71.826	394.271
HPC_LA31_N	67.94	0	67.94	371.750
HPC_LA31_P	67.929	0	67.929	371.689
HPC_LA32_N	80.186	0	80.186	442.719
HPC_LA32_P	80.202	0	80.202	442.811
HPC_LA33_N	79.976	0	79.976	441.501
HPC_LA33_P	80.016	0	80.016	441.735
HSPC_CLK0_M2C_N	73.719	0	73.723	410.707
HSPC_CLK0_M2C_P	73.736	0	73.741	410.803
HSPC_CLK1_M2C_N	73.703	0	73.707	410.615
HSPC_CLK1_M2C_P	73.703	0	73.707	410.614
HSPC_CLK2_BIDIR_N	73.702	0	73.706	410.610
HSPC_CLK2_BIDIR_P	73.703	0	73.707	410.615
HSPC_CLK3_BIDIR_N	73.703	0	73.707	410.615
HSPC_CLK3_BIDIR_P	73.703	0	73.707	410.615

HSPC_DP0_C2M_N	97.923	0	97.917	554.792
HSPC_DP0_C2M_P	97.942	0	97.945	554.901
HSPC_DP0_M2C_N	74.838	0	74.893	415.942
HSPC_DP0_M2C_P	74.838	0	74.893	415.942
HSPC_DP1_C2M_N	97.923	0	97.93	554.792
HSPC_DP1_C2M_P	97.923	0	97.926	554.792
HSPC_DP1_M2C_N	74.838	0	74.903	357.776
HSPC_DP1_M2C_P	74.838	0	74.917	352.534
HSPC_DP2_C2M_N	97.923	0	97.926	554.791
HSPC_DP2_C2M_P	97.923	0	97.926	554.792
HSPC_DP2_M2C_N	74.842	0	74.845	415.962
HSPC_DP2_M2C_P	74.842	0	74.845	415.962
HSPC_DP3_C2M_N	97.918	0	97.922	554.766
HSPC_DP3_C2M_P	97.919	0	97.923	554.772
HSPC_DP3_M2C_N	74.832	0	74.938	415.845
HSPC_DP3_M2C_P	74.842	0	74.85	415.962
HSPC_DP4_C2M_N	47.981	0	47.984	265.982
HSPC_DP4_C2M_P	47.955	0	47.959	265.836
HSPC_DP4_M2C_N	55.814	0	55.818	305.623
HSPC_DP4_M2C_P	55.814	0	55.818	305.623
HSPC_DP5_C2M_N	48.229	0	48.233	267.419
HSPC_DP5_C2M_P	48.229	0	48.233	267.419
HSPC_DP5_M2C_N	55.755	0	55.769	305.280
HSPC_DP5_M2C_P	55.755	0	55.762	305.280
HSPC_DP6_C2M_N	48.06	0	48.063	266.440
HSPC_DP6_C2M_P	48.083	0	48.087	266.576
HSPC_DP6_M2C_N	55.73	0	55.87	304.797
HSPC_DP6_M2C_P	55.73	0	55.786	304.792
HSPC_DP7_C2M_N	48.153	0	48.157	266.978
HSPC_DP7_C2M_P	48.153	0	48.157	266.978
HSPC_DP7_M2C_N	55.711	0	55.715	305.025
HSPC_DP7_M2C_P	55.735	0	55.739	305.164
HSPC_DP8_C2M_N	56.974	0	56.977	317.944
HSPC_DP8_C2M_P	56.974	0	56.977	317.987
HSPC_DP8_M2C_N	56.915	0	56.919	312.008
HSPC_DP8_M2C_P	56.915	0	56.919	312.005
HSPC_DP9_C2M_N	56.968	0	56.972	317.956
HSPC_DP9_C2M_P	56.968	0	56.972	317.956
HSPC_DP9_M2C_N	56.913	0	56.917	311.998
HSPC_DP9_M2C_P	56.913	0	56.917	311.998
HSPC_DP10_C2M_N	56.868	0	56.872	313.439
HSPC_DP10_C2M_P	56.868	0	56.872	313.439
HSPC_DP10_M2C_N	56.942	0	56.946	311.709
HSPC_DP10_M2C_P	56.908	0	56.912	311.513
HSPC_DP11_C2M_N	56.868	0	56.922	313.439
HSPC_DP11_C2M_P	56.868	0	56.922	313.439
HSPC_DP11_M2C_N	56.902	0	56.906	311.931

HSPC_DP11_M2C_P	56.902	0	56.906	311.931
HSPC_DP12_C2M_N	73.845	0	73.849	415.552
HSPC_DP12_C2M_P	73.875	0	73.878	415.725
HSPC_DP12_M2C_N	90.743	0	90.739	502.354
HSPC_DP12_M2C_P	90.777	0	90.784	502.555
HSPC_DP13_C2M_N	73.868	0	73.866	408.223
HSPC_DP13_C2M_P	73.868	0	73.86	408.517
HSPC_DP13_M2C_N	90.73	0	90.752	468.787
HSPC_DP13_M2C_P	90.757	0	90.784	461.102
HSPC_DP14_C2M_N	73.875	0	73.878	415.725
HSPC_DP14_C2M_P	73.875	0	73.878	415.725
HSPC_DP14_M2C_N	90.945	0	90.949	512.680
HSPC_DP14_M2C_P	90.945	0	90.949	512.680
HSPC_DP15_C2M_N	73.875	0	73.878	415.122
HSPC_DP15_C2M_P	73.875	0	73.878	415.122
HSPC_DP15_M2C_N	90.837	0	90.841	512.055
HSPC_DP15_M2C_P	90.839	0	90.843	512.056
HSPC_GBTCLK0_M2C_C_N	14.028	0	14.028	64.062
HSPC_GBTCLK0_M2C_C_P	14.028	0	14.028	64.063
HSPC_GBTCLK0_M2C_N	62.976	0	62.996	353.682
HSPC_GBTCLK0_M2C_P	62.98	0	63.027	353.694
HSPC_GBTCLK1_M2C_C_N	14.067	0	14.068	64.278
HSPC_GBTCLK1_M2C_C_P	14.067	0	14.067	64.278
HSPC_GBTCLK1_M2C_N	62.98	0	62.983	353.692
HSPC_GBTCLK1_M2C_P	62.98	0	62.983	353.699
HSPC_GBTCLK2_M2C_C_N	13.06	0	13.022	58.678
HSPC_GBTCLK2_M2C_C_P	13.059	0	13.021	58.672
HSPC_GBTCLK2_M2C_N	61.332	0	61.286	344.080
HSPC_GBTCLK2_M2C_P	61.318	0	61.271	343.781
HSPC_GBTCLK3_M2C_C_N	15.14	0	15.138	70.250
HSPC_GBTCLK3_M2C_C_P	15.14	0	15.138	70.250
HSPC_GBTCLK3_M2C_N	61.332	0	61.286	343.869
HSPC_GBTCLK3_M2C_P	61.332	0	62.175	344.159
HSPC_HA00_CC_N	69.811	0	69.815	378.901
HSPC_HA00_CC_P	69.811	0	69.815	378.901
HSPC_HA01_CC_N	63.84	0	63.844	344.382
HSPC_HA01_CC_P	63.84	0	63.851	344.328
HSPC_HA02_N	75.738	0	75.742	413.164
HSPC_HA02_P	75.738	0	75.742	413.164
HSPC_HA03_N	72.719	0	72.722	395.708
HSPC_HA03_P	72.719	0	72.891	395.666
HSPC_HA04_N	65.142	0	65.24	351.905
HSPC_HA04_P	65.142	0	65.145	351.862
HSPC_HA05_N	68.095	0	68.099	368.981
HSPC_HA05_P	68.095	0	68.099	368.938
HSPC_HA06_N	91.446	0	91.934	503.967
HSPC_HA06_P	91.446	0	91.934	503.967

HSPC_HA07_N	83.875	0	84.245	460.199
HSPC_HA07_P	83.875	0	83.878	460.199
HSPC_HA08_N	64.263	0	64.267	346.827
HSPC_HA08_P	64.263	0	64.256	346.828
HSPC_HA09_N	62.097	0	62.101	334.306
HSPC_HA09_P	62.097	0	62.101	334.306
HSPC_HA10_N	106.834	0	106.838	592.923
HSPC_HA10_P	106.834	0	106.838	592.923
HSPC_HA11_N	78.607	0	78.611	429.749
HSPC_HA11_P	78.607	0	78.611	429.749
HSPC_HA12_N	58.926	0	58.93	315.976
HSPC_HA12_P	58.926	0	58.93	315.976
HSPC_HA13_N	62.449	0	62.453	336.340
HSPC_HA13_P	62.449	0	62.453	336.340
HSPC_HA14_N	75.978	0	75.982	414.549
HSPC_HA14_P	75.978	0	75.982	414.549
HSPC_HA15_N	62.152	0	62.156	334.625
HSPC_HA15_P	62.152	0	62.156	334.625
HSPC_HA16_N	59.562	0	59.565	319.649
HSPC_HA16_P	59.562	0	59.565	319.649
HSPC_HA17_CC_N	118.472	0	118.476	660.199
HSPC_HA17_CC_P	118.472	0	118.476	660.199
HSPC_HA18_N	113.009	0	113.015	628.615
HSPC_HA18_P	113.009	0	113.012	628.615
HSPC_HA19_N	60.113	0	60.117	322.839
HSPC_HA19_P	60.113	0	60.117	322.839
HSPC_HA20_N	61.196	0	61.2	329.098
HSPC_HA20_P	61.196	0	61.2	329.098
HSPC_HA21_N	98.138	0	98.136	542.652
HSPC_HA21_P	98.094	0	98.104	542.399
HSPC_HA22_N	76.265	0	76.269	416.207
HSPC_HA22_P	76.265	0	76.269	416.207
HSPC_HA23_N	86.56	0	86.567	475.722
HSPC_HA23_P	86.56	0	86.564	475.722
HSPC_HB00_CC_N	67.856	0	68.053	379.703
HSPC_HB00_CC_P	67.85	0	67.916	379.503
HSPC_HB01_N	58.464	0	58.468	325.259
HSPC_HB01_P	58.475	0	58.479	325.320
HSPC_HB02_N	54.278	0	54.281	301.061
HSPC_HB02_P	54.288	0	54.292	301.121
HSPC_HB03_N	51.973	0	51.977	287.741
HSPC_HB03_P	51.963	0	51.966	287.680
HSPC_HB04_N	58.571	0	58.575	325.877
HSPC_HB04_P	57.554	0	57.558	319.997
HSPC_HB05_N	53.413	0	53.416	296.062
HSPC_HB05_P	53.442	0	53.446	296.232
HSPC_HB06_CC_N	75.806	0	75.81	425.492

HSPC_HB06_CC_P	75.806	0	75.81	425.492
HSPC_HB07_N	59.19	0	59.176	329.451
HSPC_HB07_P	59.201	0	59.197	329.514
HSPC_HB08_N	57.005	0	57.184	316.895
HSPC_HB08_P	57.024	0	57.028	316.934
HSPC_HB09_N	59.78	0	59.784	332.863
HSPC_HB09_P	59.78	0	59.784	332.864
HSPC_HB10_N	115.218	0	115.222	653.286
HSPC_HB10_P	115.218	0	115.212	653.286
HSPC_HB11_N	88.037	0	88.041	496.183
HSPC_HB11_P	88.037	0	88.041	496.183
HSPC_HB12_N	56.588	0	56.592	314.415
HSPC_HB12_P	56.578	0	56.581	314.354
HSPC_HB13_N	58.756	0	58.749	326.942
HSPC_HB13_P	58.745	0	58.749	326.881
HSPC_HB14_N	98.489	0	98.493	556.596
HSPC_HB14_P	98.489	0	98.482	556.596
HSPC_HB15_N	106.564	0	106.568	603.268
HSPC_HB15_P	106.564	0	106.568	603.268
HSPC_HB16_N	64.13	0	64.126	358.005
HSPC_HB16_P	64.13	0	64.134	358.006
HSPC_HB17_CC_N	72.857	0	73.581	408.448
HSPC_HB17_CC_P	72.857	0	72.861	408.449
HSPC_HB18_N	78.88	0	78.884	443.257
HSPC_HB18_P	78.859	0	78.863	443.136
HSPC_HB19_N	96.869	0	97.357	547.232
HSPC_HB19_P	96.869	0	97.357	547.232
HSPC_HB20_N	57.01	0	57.013	316.851
HSPC_HB20_P	57.01	0	57.013	316.851
HSPC_HB21_N	52.41	0	52.413	290.264
HSPC_HB21_P	52.41	0	52.413	290.264
HSPC_LA00_CC_N	61.854	0	61.858	344.853
HSPC_LA00_CC_P	61.865	0	61.869	344.914
HSPC_LA01_CC_N	47.676	0	47.68	262.903
HSPC_LA01_CC_P	47.665	0	47.669	262.842
HSPC_LA02_N	67.926	0	67.93	371.691
HSPC_LA02_P	67.937	0	67.94	371.752
HSPC_LA03_N	76.141	0	76.145	419.302
HSPC_LA03_P	76.138	0	76.142	419.283
HSPC_LA04_N	59.84	0	59.854	330.213
HSPC_LA04_P	59.84	0	59.854	330.213
HSPC_LA05_N	46.423	0	46.426	255.661
HSPC_LA05_P	46.433	0	46.437	255.721
HSPC_LA06_N	46.125	0	46.129	253.942
HSPC_LA06_P	46.128	0	46.132	253.958
HSPC_LA07_N	58.953	0	58.96	328.081
HSPC_LA07_P	58.946	0	59.014	328.041

HSPC_LA08_N	60.777	0	60.781	338.625
HSPC_LA08_P	60.756	0	60.76	338.503
HSPC_LA09_N	47.706	0	47.71	263.079
HSPC_LA09_P	47.71	0	47.714	263.103
HSPC_LA10_N	43.653	0	43.657	239.654
HSPC_LA10_P	43.643	0	43.647	239.593
HSPC_LA11_N	87.714	0	87.717	486.367
HSPC_LA11_P	87.714	0	87.717	486.367
HSPC_LA12_N	52.878	0	52.886	292.972
HSPC_LA12_P	52.878	0	52.882	292.972
HSPC_LA13_N	50.902	0	50.906	281.552
HSPC_LA13_P	50.973	0	50.977	281.959
HSPC_LA14_N	46.101	0	46.104	253.799
HSPC_LA14_P	46.098	0	46.102	253.784
HSPC_LA15_N	60.548	0	60.987	337.299
HSPC_LA15_P	60.548	0	60.551	337.299
HSPC_LA16_N	52.212	0	52.215	289.120
HSPC_LA16_P	52.201	0	52.205	289.059
HSPC_LA17_CC_N	99.88	0	99.883	556.873
HSPC_LA17_CC_P	99.875	0	99.878	556.843
HSPC_LA18_CC_N	97.096	0	97.076	540.742
HSPC_LA18_CC_P	97.048	0	97.043	540.459
HSPC_LA19_N	111.989	0	111.992	627.047
HSPC_LA19_P	111.985	0	111.989	627.029
HSPC_LA20_N	106.816	0	106.819	597.068
HSPC_LA20_P	106.826	0	106.83	597.129
HSPC_LA21_N	127.043	0	127.046	714.290
HSPC_LA21_P	127.053	0	127.057	714.351
HSPC_LA22_N	126.037	0	126.041	708.463
HSPC_LA22_P	126.02	0	126.024	708.366
HSPC_LA23_N	99.544	0	99.547	554.925
HSPC_LA23_P	99.512	0	99.626	554.742
HSPC_LA24_N	106.375	0	106.371	594.516
HSPC_LA24_P	106.354	0	106.358	594.394
HSPC_LA25_N	100.968	0	101.54	563.178
HSPC_LA25_P	100.968	0	101.459	563.178
HSPC_LA26_N	97.773	0	97.776	544.662
HSPC_LA26_P	97.786	0	97.79	544.741
HSPC_LA27_N	98.047	0	98.05	546.249
HSPC_LA27_P	98.164	0	98.168	546.932
HSPC_LA28_N	120.064	0	120.058	673.846
HSPC_LA28_P	119.996	0	120.021	673.453
HSPC_LA29_N	137.884	0	137.887	777.117
HSPC_LA29_P	137.884	0	137.889	777.117
HSPC_LA30_N	102.266	0	102.27	570.702
HSPC_LA30_P	102.234	0	102.238	570.519
HSPC_LA31_N	113.186	0	113.194	633.988

HSPC_LA31_P	113.188	0	113.192	634.001
HSPC_LA32_N	102.263	0	102.267	570.686
HSPC_LA32_P	102.263	0	102.267	570.686
HSPC_LA33_N	90.095	0	90.099	500.168
HSPC_LA33_P	90.064	0	90.067	499.985
HSPC_REFCLK_C2M_N	73.877	0	73.88	411.617
HSPC_REFCLK_C2M_P	73.894	0	73.898	411.717
HSPC_REFCLK_M2C_N	73.688	0	73.691	410.525
HSPC_REFCLK_M2C_P	73.688	0	73.681	410.525
HSPC_SYNC_C2M_N	73.672	0	73.675	410.432
HSPC_SYNC_C2M_P	73.672	0	73.665	410.432
HSPC_SYNC_M2C_N	73.688	0	74.115	410.525
HSPC_SYNC_M2C_P	73.688	0	74.115	410.525
M.2_CLKREQ#	0	0	75.797	397.824
M.2_CLK_N	1.633	0	1.687	9.082
M.2_CLK_P	1.664	0	1.718	9.256
M.2_PERST_#	65.255	0	65.276	365.497
M.2_REFCLK_N	0	0	55.885	260.616
M.2_REFCLK_P	0	0	55.854	265.908
M.2_RX0_N	78.29	0	78.232	416.376
M.2_RX0_P	78.29	0	78.366	414.859
M.2_RX1_N	78.29	0	78.212	433.471
M.2_RX1_P	78.29	0	78.208	433.555
M.2_RX2_N	78.29	0	78.29	433.471
M.2_RX2_P	78.29	0	78.29	433.555
M.2_RX3_N	78.29	0	78.335	413.470
M.2_RX3_P	78.273	0	78.32	413.372
M.2_TX0_N	78.625	0	78.642	424.312
M.2_TX0_P	78.625	0	78.642	424.161
M.2_TX1_N	78.565	0	78.582	435.037
M.2_TX1_P	78.556	0	78.574	434.989
M.2_TX2_N	78.584	0	78.602	434.110
M.2_TX2_P	78.584	0	78.602	434.110
M.2_TX3_N	78.565	0	78.582	434.771
M.2_TX3_P	78.565	0	78.582	434.937
M.2_WAKE#	0	0	85.877	453.571
M2_TX0_N	2.311	0	2.311	0.000
M2_TX0_P	2.317	0	2.317	0.000
M2_TX1_N	2.305	0	2.305	0.000
M2_TX1_P	2.297	0	2.297	0.000
M2_TX2_N	2.324	0	2.324	0.000
M2_TX2_P	2.33	0	2.33	0.000
M2_TX3_N	2.352	0	2.352	0.000
M2_TX3_P	2.363	0	2.363	0.000
QSPI1_CS	0	0	23.829	121.855
QSPI1_DATA0	32.703	0	32.716	177.402
QSPI1_DATA1	32.703	0	32.716	177.322

QSPI1_DATA2	0	0	32.691	168.415
QSPI1_DATA3	0	0	32.557	167.603
QSPI1_RST	0	0	6.676	36.903
QSPI_CCLK	0	0	128.735	712.285
QSPI_CS	0	0	36.184	178.879
QSPI_DATA0	19.654	0	21.562	107.205
QSPI_DATA1	19.655	0	21.562	107.338
QSPI_DATA2	0	0	19.631	96.532
QSPI_DATA3	0	0	19.631	96.625
QSPI_RST	0	0	8.245	45.183
REFCLK_127_N	0	0	67.223	373.834
REFCLK_127_P	0	0	67.224	373.834
REFCLK_224_N	0	0	20.619	103.387
REFCLK_224_P	0	0	20.561	103.061
REFCLK_225_N	0	0	36.122	191.275
REFCLK_225_P	0	0	36.122	191.351
REFCLK_228_N	0	0	51.479	282.639
REFCLK_228_P	0	0	51.479	282.583
RESET	100.035	0	100.035	566.191
RXD	186.136	0	186.138	1075.365
SCL_FMC_HPC	0	0	229.229	1322.537
SCL_FMC_HSPC	0	0	35.752	197.409
SDA_FMC_HPC	0	0	229.043	1321.298
SDA_FMC_HSPC	0	0	35.774	197.627
SEL	0	0	224.788	1217.098
SFP0_MOD_ABS	0	0	141.895	808.577
SFP0_RS0	0	0	134.517	765.839
SFP0_RS1	0	0	139.843	796.691
SFP0_RX_LOS	0	0	133.329	758.955
SFP0_RX_N	116.867	0	117.122	645.521
SFP0_RX_P	116.867	0	117.122	645.521
SFP0_SCL	0	0	164.661	928.981
SFP0_SDA	0	0	167.744	947.393
SFP0_TX_DSBL	0	0	158.726	906.087
SFP0_TX_FLT	0	0	128.245	728.713
SFP0_TX_N	114.735	0	114.752	631.815
SFP0_TX_P	114.735	0	114.752	631.815
SFP1_MOD_ABS	0	0	117.752	668.544
SFP1_RS0	0	0	113.883	642.163
SFP1_RS1	0	0	122.361	695.198
SFP1_RX_LOS	0	0	119.791	676.310
SFP1_RX_N	116.795	0	116.541	643.337
SFP1_RX_P	116.795	0	116.546	643.412
SFP1_SCL	0	0	176.464	997.875
SFP1_SDA	0	0	181.108	1024.351
SFP1_TX_DSBL	0	0	160.069	912.909
SFP1_TX_FLT	0	0	110.226	625.147

SFP1_TX_N	114.807	0	115.061	633.604
SFP1_TX_P	114.807	0	115.061	633.604
SFP_CLK_N	0	0	138.04	764.106
SFP_CLK_P	0	0	138.124	764.571
SMA_CLK0_C_N	12.592	0	12.554	55.717
SMA_CLK0_C_P	12.592	0	12.554	55.717
SMA_CLK0_N	135.96	0	135.84	777.020
SMA_CLK0_P	134.944	0	135.012	771.146
SMA_RX0_C_N	4.865	0	4.86	0.000
SMA_RX0_C_P	4.67	0	4.665	0.000
SMA_RX0_N	135.424	0	135.428	761.875
SMA_RX0_P	135.424	0	135.431	764.231
SMA_RX1_C_N	4.842	0	4.86	0.000
SMA_RX1_C_P	4.647	0	4.665	0.000
SMA_RX1_N	135.426	0	135.427	761.594
SMA_RX1_P	135.426	0	135.429	765.424
SMA_TX0_N	137.593	0	137.598	752.076
SMA_TX0_P	137.593	0	137.598	750.369
SMA_TX1_N	137.673	0	137.673	748.782
SMA_TX1_P	137.673	0	137.673	746.415
SPI_CS_N	0	0	21.547	108.458
SPI_DQ0	21.559	0	21.559	116.536
SPI_DQ1	21.559	0	21.559	116.536
SPI_DQ2	0	0	21.547	108.744
SPI_DQ3	0	0	21.547	108.987
SPI_RST	0	0	29.399	154.348
SPI_SCK	0	0	29.384	153.983
SYS_CCLK	47.71	0	47.711	264.427
SYS_CLK_N	2.206	0	2.244	0.000
SYS_CLK_P	2.23	0	2.245	0.000
SYS_REFCLK_N	0	0	14.622	28.320
SYS_REFCLK_P	0	0	14.622	27.206
SYS_VREF_N	0	0	26.035	92.417
SYS_VREF_P	0	0	26.035	123.416
TXD	186.805	0	186.805	1079.422
UART _RX	85.01	0	85.01	473.859
UART _TX	86.001	0	86.001	479.582
V _N	0	0	122.144	0.000
V _P	0	0	122.156	0.000
VREF_N	0	0	35.147	145.064
VREF_P	0	0	35.146	176.820
V_N	4.166	0	4.166	0.000
V_P	4.184	0	4.184	0.000
XA	7.844	0	7.887	42.922
XB	3.59	0	3.59	19.644
XI	4.897	0	4.951	26.798