

Pin List: XEM7310

2019-01-22

| Connector | Pin | FPGA Pin | Description | Length (mm) | BRK7010 |
|-----------|-----|----------|-------------|-------------|---------|
| MC1 | 1 | | +VDCIN | | J1-1 |
| MC1 | 2 | | DGND | | J1-2 |
| MC1 | 3 | | +VDCIN | | J1-3 |
| MC1 | 4 | | +1.0VDD | | J1-4 |
| MC1 | 5 | | +VDCIN | | J1-5 |
| MC1 | 6 | | +1.0VDD | | J1-6 |
| MC1 | 7 | | +1.8VDD | | J1-7 |
| MC1 | 8 | AB11 | SYS_CLK_MC1 | 21.574 | J1-8 |
| MC1 | 9 | | +3.3VDD | | J1-9 |
| MC1 | 10 | M9 | XADC_VN | | J1-10 |
| MC1 | 11 | | +3.3VDD | | J1-11 |
| MC1 | 12 | L10 | XADC_VP | | J1-12 |
| MC1 | 13 | | +3.3VDD | | J1-13 |
| MC1 | 14 | | DGND | | J1-14 |
| MC1 | 15 | W9 | B34_L24P | 27.853 | J1-15 |
| MC1 | 16 | V9 | B34_L21P | 23.937 | J1-16 |
| MC1 | 17 | Y9 | B34_L24N | 26.696 | J1-17 |
| MC1 | 18 | V8 | B34_L21N | 23.765 | J1-18 |
| MC1 | 19 | R6 | B34_L17P | 31.982 | J1-19 |
| MC1 | 20 | V7 | B34_L19P | 22.076 | J1-20 |
| MC1 | 21 | T6 | B34_L17N | 30.716 | J1-21 |
| MC1 | 22 | W7 | B34_L19N | 20.746 | J1-22 |
| MC1 | 23 | U6 | B34_L16P | 27.433 | J1-23 |
| MC1 | 24 | Y8 | B34_L23P | 18.093 | J1-24 |
| MC1 | 25 | V5 | B34_L16N | 26.926 | J1-25 |
| MC1 | 26 | Y7 | B34_L23N | 18.54 | J1-26 |
| MC1 | 27 | T5 | B34_L14P | 26.503 | J1-27 |
| MC1 | 28 | W6 | B34_L15P | 19.138 | J1-28 |
| MC1 | 29 | U5 | B34_L14N | 25.608 | J1-29 |
| MC1 | 30 | W5 | B34_L15N | 19.577 | J1-30 |
| MC1 | 31 | AA5 | B34_L10P | 21.028 | J1-31 |

| Connector | Pin | FPGA Pin | Description | Length (mm) | BRK7010 |
|-----------|-----|----------|-------------|-------------|---------|
| MC1 | 32 | R4 | B34_L13P | 27.920 | J1-32 |
| MC1 | 33 | AB5 | B34_L10N | 20.134 | J1-33 |
| MC1 | 34 | T4 | B34_L13N | 25.206 | J1-34 |
| MC1 | 35 | | DGND | | J1-35 |
| MC1 | 36 | | VCCO_MC1 | | J1-36 |
| MC1 | 37 | AB7 | B34_L20P | 16.234 | J1-37 |
| MC1 | 38 | Y4 | B34_L11P | 20.129 | J1-38 |
| MC1 | 39 | AB6 | B34_L20N | 16.714 | J1-39 |
| MC1 | 40 | AA4 | B34_L11N | 19.557 | J1-40 |
| MC1 | 41 | R3 | B34_L3P | 26.716 | J2-1 |
| MC1 | 42 | Y6 | B34_L18P | 12.947 | J2-2 |
| MC1 | 43 | R2 | B34_L3N | 26.199 | J2-3 |
| MC1 | 44 | AA6 | B34_L18N | 11.630 | J2-4 |
| MC1 | 45 | Y3 | B34_L9P | 20.655 | J2-5 |
| MC1 | 46 | AA8 | B34_L22P | 9.743 | J2-6 |
| MC1 | 47 | AA3 | B34_L9N | 19.450 | J2-7 |
| MC1 | 48 | AB8 | B34_L22N | 8.497 | J2-8 |
| MC1 | 49 | U2 | B34_L2P | 22.529 | J2-9 |
| MC1 | 50 | U3 | B34_L6P | 16.995 | J2-10 |
| MC1 | 51 | V2 | B34_L2N | 21.382 | J2-11 |
| MC1 | 52 | V3 | B34_L6N | 15.659 | J2-12 |
| MC1 | 53 | W2 | B34_L4P | 19.256 | J2-13 |
| MC1 | 54 | W1 | B34_L5P | 15.830 | J2-14 |
| MC1 | 55 | | DGND | | J2-15 |
| MC1 | 56 | | VCCO_MC1 | | J2-16 |
| MC1 | 57 | Y2 | B34_L4N | 17.689 | J2-17 |
| MC1 | 58 | Y1 | B34_L5N | 13.608 | J2-18 |
| MC1 | 59 | T1 | B34_L1P | 21.474 | J2-19 |
| MC1 | 60 | AB3 | B34_L8P | 9.054 | J2-20 |
| MC1 | 61 | U1 | B34_L1N | 20.217 | J2-21 |
| MC1 | 62 | AB2 | B34_L8N | 9.550 | J2-22 |
| MC1 | 63 | AA1 | B34_L7P | 15.811 | J2-23 |
| MC1 | 64 | Y13 | B13_L5P | 43.978 | J2-24 |
| MC1 | 65 | AB1 | B34_L7N | 14.617 | J2-25 |

| Connector | Pin | FPGA Pin | Description | Length (mm) | BRK7010 |
|-----------|-----|----------|---------------|-------------|---------|
| MC1 | 66 | AA14 | B13_L5N | 42.695 | J2-26 |
| MC1 | 67 | AB16 | B13_L2P | 29.868 | J2-27 |
| MC1 | 68 | AA13 | B13_L3P | 41.798 | J2-28 |
| MC1 | 69 | AB17 | B13_L2N | 31.153 | J2-29 |
| MC1 | 70 | AB13 | B13_L3N | 41.239 | J2-30 |
| MC1 | 71 | AA15 | B13_L4P | 42.504 | J2-31 |
| MC1 | 72 | W15 | B13_L16P | 34.678 | J2-32 |
| MC1 | 73 | AB15 | B13_L4N | 41.728 | J2-33 |
| MC1 | 74 | W16 | B13_L16N | 36.231 | J2-34 |
| MC1 | 75 | Y16 | B13_L1P | 41.295 | J2-35 |
| MC1 | 76 | AA16 | B13_L1N | 34.804 | J2-36 |
| MC1 | 77 | V4 | B34_L12P_MRCC | 26.128 | J2-37 |
| MC1 | 78 | | DGND | | J2-38 |
| MC1 | 79 | W4 | B34_L12N_MRCC | 26.447 | J2-39 |
| MC1 | 80 | | DGND | | J2-40 |
| MC2 | 1 | | DGND | | J3-1 |
| MC2 | 2 | | +3.3VDD | | J3-2 |
| MC2 | 3 | | +VCCBATT | | J3-3 |
| MC2 | 4 | | +3.3VDD | | J3-4 |
| MC2 | 5 | V12 | FPGA_TCK | | J6-6 |
| MC2 | 6 | | +3.3VDD | | J3-6 |
| MC2 | 7 | T13 | FPGA_TMS | | J6-4 |
| MC2 | 8 | U13 | FPGA_TDO | | J6-8 |
| MC2 | 9 | R13 | FPGA_TDI | | J6-10 |
| MC2 | 10 | F4 | B35_IO0 | 38.931 | J3-10 |
| MC2 | 11 | AB12 | SYS_CLK_MC2 | 46.306 | J3-11 |
| MC2 | 12 | L6 | B35_IO25 | 38.527 | J3-12 |
| MC2 | 13 | | DGND | | J3-13 |
| MC2 | 14 | | DGND | | J3-14 |
| MC2 | 15 | P5 | B35_L21P | 33.833 | J3-15 |
| MC2 | 16 | P6 | B35_L24P | 38.057 | J3-16 |
| MC2 | 17 | P4 | B35_L21N | 34.240 | J3-17 |
| MC2 | 18 | N5 | B35_L24N | 38.330 | J3-18 |
| MC2 | 19 | N4 | B35_L19P | 31.940 | J3-19 |

| Connector | Pin | FPGA Pin | Description | Length (mm) | BRK7010 |
|-----------|-----|----------|-------------|-------------|---------|
| MC2 | 20 | P2 | B35_L22P | 40.085 | J3-20 |
| MC2 | 21 | N3 | B35_L19N | 32.209 | J3-21 |
| MC2 | 22 | N2 | B35_L22N | 39.457 | J3-22 |
| MC2 | 23 | L5 | B35_L18P | 28.038 | J3-23 |
| MC2 | 24 | R1 | B35_L20P | 41.140 | J3-24 |
| MC2 | 25 | L4 | B35_L18N | 28.650 | J3-25 |
| MC2 | 26 | P1 | B35_L20N | 39.947 | J3-26 |
| MC2 | 27 | M6 | B35_L23P | 27.602 | J3-27 |
| MC2 | 28 | M3 | B35_L16P | 35.547 | J3-28 |
| MC2 | 29 | M5 | B35_L23N | 28.186 | J3-29 |
| MC2 | 30 | M2 | B35_L16N | 36.242 | J3-30 |
| MC2 | 31 | M1 | B35_L15P | 31.483 | J3-31 |
| MC2 | 32 | K6 | B35_L17P | 28.973 | J3-32 |
| MC2 | 33 | L1 | B35_L15N | 30.114 | J3-33 |
| MC2 | 34 | J6 | B35_L17N | 26.876 | J3-34 |
| MC2 | 35 | | VCCO_MC2 | | J3-35 |
| MC2 | 36 | | DGND | | J3-36 |
| MC2 | 37 | K2 | B35_L9P | 26.233 | J3-37 |
| MC2 | 38 | L3 | B35_L14P | 31.306 | J3-38 |
| MC2 | 39 | J2 | B35_L9N | 25.579 | J3-39 |
| MC2 | 40 | K3 | B35_L14N | 30.796 | J3-40 |
| MC2 | 41 | K1 | B35_L7P | 24.103 | J4-1 |
| MC2 | 42 | J5 | B35_L10P | 25.935 | J4-2 |
| MC2 | 43 | J1 | B35_L7N | 23.547 | J4-3 |
| MC2 | 44 | H5 | B35_L10N | 25.634 | J4-4 |
| MC2 | 45 | H3 | B35_L11P | 20.106 | J4-5 |
| MC2 | 46 | H2 | B35_L8P | 26.105 | J4-6 |
| MC2 | 47 | G3 | B35_L11N | 19.518 | J4-7 |
| MC2 | 48 | G2 | B35_L8N | 24.796 | J4-8 |
| MC2 | 49 | E2 | B35_L4P | 16.329 | J4-9 |
| MC2 | 50 | G1 | B35_L5P | 24.944 | J4-10 |
| MC2 | 51 | D2 | B35_L4N | 15.914 | J4-11 |
| MC2 | 52 | F1 | B35_L5N | 25.056 | J4-12 |
| MC2 | 53 | F3 | B35_L6P | 15.579 | J4-13 |

| Connector | Pin | FPGA Pin | Description | Length (mm) | BRK7010 |
|-----------|-----|----------|---------------|-------------|---------|
| MC2 | 54 | E1 | B35_L3P | 22.263 | J4-14 |
| MC2 | 55 | | VCCO_MC2 | | J4-15 |
| MC2 | 56 | | DGND | | J4-16 |
| MC2 | 57 | E3 | B35_L6N | 15.027 | J4-17 |
| MC2 | 58 | D1 | B35_L3N | 21.386 | J4-18 |
| MC2 | 59 | B1 | B35_L1P | 12.002 | J4-19 |
| MC2 | 60 | C2 | B35_L2P | 17.193 | J4-20 |
| MC2 | 61 | A1 | B35_L1N | 9.240 | J4-21 |
| MC2 | 62 | B2 | B35_L2N | 15.957 | J4-22 |
| MC2 | 63 | K4 | B35_L13P | 21.257 | J4-23 |
| MC2 | 64 | U15 | B13_L14P | 47.649 | J4-24 |
| MC2 | 65 | J4 | B35_L13N | 19.769 | J4-25 |
| MC2 | 66 | V15 | B13_L14N | 48.907 | J4-26 |
| MC2 | 67 | T16 | B13_L17P | 40.409 | J4-27 |
| MC2 | 68 | T14 | B13_L15P | 51.892 | J4-28 |
| MC2 | 69 | U16 | B13_L17N | 41.542 | J4-29 |
| MC2 | 70 | T15 | B13_L15N | 53.553 | J4-30 |
| MC2 | 71 | V13 | B13_L13P | 43.141 | J4-31 |
| MC2 | 72 | W14 | B13_L6P | 57.137 | J4-32 |
| MC2 | 73 | V14 | B13_L13N | 44.768 | J4-33 |
| MC2 | 74 | Y14 | B13_L6N | 54.597 | J4-34 |
| MC2 | 75 | Y11 | B13_L11P | 42.257 | J4-35 |
| MC2 | 76 | Y12 | B13_L11N | 49.008 | J4-36 |
| MC2 | 77 | H4 | B35_L12P_MRCC | 23.348 | J4-37 |
| MC2 | 78 | | DGND | | J4-38 |
| MC2 | 79 | G4 | B35_L12N_MRCC | 23.646 | J4-39 |
| MC2 | 80 | | DGND | | J4-40 |