



## MPC5510DEMO REV. A Component List 5/21/2008

| Description                          | Quantity | Mounting Style | Designator                              | Manufacture part number          |
|--------------------------------------|----------|----------------|---|----------------------------------|
| <b>Components On Top</b>             |          |                |   |                                  |
| Capacitor 0.22uF 25V Ceramic         | 1        | RES 0805       | C33                                     | TDK: C2012X8R1E224K              |
| Capacitor 1nF 25V Ceramic            | 1        | RES 0603       | C43                                     | Murata:<br>GRM188R71E102KA01D    |
| Capacitor 22 pF 50V (NPO) Ceramic    | 2        | RES 0603       | C8,C9                                   | AVX: 06035A220JAT2A              |
| Capacitor 0.1 uF 25V (X7R) Ceramic   | 10       | RES 0603       | C19,C39,C45,C47,C49,C51,C53,C55,C57,C59 | Murata:<br>GRM188R71E104KA01D    |
| 100uF 16V Electrolytic 20%           | 1        | Thru-hole 0.1" | C29                                     | Panasonic: ECA1AM101I            |
| Resistor 1M Ohm 5% 1/10 W            | 1        | RES 0603       | Rf                                      | Dale: CRCW0603105JNEA            |
| Resistor 0 Ohm 5% 1/10W 0603 SMD     | 1        | RES 0603       | Rs                                      | Vishay/Dale:<br>CRCW06030000Z0EA |
| Surface Mount LED ORANGE             | 5        | LED 1206 0805  | PC12,PC13,PC14,PC15,D1000               | Avago: HSMH-C150                 |
| Surface Mount LED RED                | 2        | LED 1206 0805  | D2,D3                                   | Avago: HSMH-C170                 |
| Light Touch Button, Height=7.0mm     | 5        | Thru-hole      | PC2,PC3,PC4,PC5,RESET                   | Panasonic: EVQ-PAC07K            |
| MXE-206P                             | 1        | SPEAKER        | B1                                      | MXE-206P                         |
| PJ-102B DC Power Jack<br>2.5mm/5.5mm | 1        | Thru-hole      | P1                                      | CUI: PJ-102B                     |
| Slide Power Switch DPDT              | 1        | POWER23 PIN    | K1                                      | E-Switch: EG2201                 |
| 10K Potentiometer                    | 1        | 0.1" Thru-hole | W1                                      | Bourns: 3352W-1-103LF            |
| 2K Potentiometer                     | 1        | 0.1" Thru-hole | W2                                      | Bourns: 3352W-1-202LF            |
| 12 MHz HCM49 18pF SMT Crystal        | 1        | CRYSTAL SMT    | Y1                                      | Citizens: HCM49-12.000MABJ-UT    |
| Ferrite Bead 1.5A 26Ohm@100 MHz      | 4        | RES 1206 0805  | FB4,FB5,FB6,FB7                         | Steward: MI1206K260R-10;         |
| TVS SMBJ24A                          | 1        | DO-214AA       | D4                                      | Diodes Inc: SMBJ24A-13           |
| MPC5516_208PBGA                      | 1        | BGA-208P       | U1                                      | Freescale:MPC5516_208PBGA        |
| MAX232                               | 1        | SOIC16         | U2                                      | Maxim IC:MAX232CSE+              |
| AS1117-5.0 Linear Voltage Regulator  | 1        | SOT-223        | U3                                      | Alpha: AS1117M3-5                |
| TJA1050T                             | 1        | SOIC8          | U4                                      | NXP: TJA1050TD-T                 |
| MC33661                              | 1        | SOIC8          | U5                                      | Freescale: MCZ33661EF            |
| ADM6315-45D3ARTZ                     | 1        | SOT-143        | U6                                      | Analog Devices:ADM6315-45D3ARTZ  |
| 9X2 PIN HEADER                       | 9        | 0.1" Thru-hole | J19,J20,J21,J22,J23,J24,J25,J26,J27     | Singatron: 2202-18-S-02-6.0/3.0  |



|                                   |           |                           |                        |                                      |
|-----------------------------------|-----------|---------------------------|------------------------|--------------------------------------|
| 7X2 PIN HEADER                    | 1         | 0.1" Thru-hole            | J1001                  | Singatron: 2202-14-S-02-6.0/3.0      |
| 4X2 PIN HEADER                    | 2         | 0.1" Thru-hole            | J16,J17                | Singatron: 2202-08-S-02-6.0/3.0      |
| 3X2 PIN HEADER                    | 1         | 0.1" Thru-hole            | J3                     | Singatron: 2202-06-S-02-6.0/3.0      |
| 2X2 PIN HEADER                    | 3         | 0.1" Thru-hole            | J9,J18,J28             | Singatron: 2202-04-S-02-6.0/3.0      |
| 3 PIN HEADER                      | 3         | 0.1" Thru-hole            | J5,J6,J29              | Singatron: 2201-03-S-02-6.0/3.0      |
| 2 PIN HEADER                      | 6         | 0.1" Thru-hole            | J8,J11,J12,J13,J14,J15 | Singatron: 2201-02-S-02-6.0/3.0      |
| 1 PIN HEADER                      | 1         | 0.1" Thru-hole            | TP1                    | Singatron: 2201-01-S-02-6.0/3.0      |
| LIN Connector MOLEX 39-29-5043    | 1         | LIN CONN MOLEX 39-29-5043 | J10                    | MOLEX: 39-29-5043                    |
| DB9 Female Right Angle .318 D-Sub | 2         | DB9F SLOT                 | J4,J7                  | CableWholeSale.com: 3530-14009; RoHS |
| USB Type B Right Angle Connector  | 1         | USB-B                     | J1000                  | Singatron: KS001-BNW-L               |
|                                   |           |                           |                        |                                      |
| <b>Components Mounted On Top</b>  | <b>76</b> |                           |                        |                                      |



**Components On Bottom**

|                                     |    |                          |   |                                      |
|-------------------------------------|----|--------------------------|---|--------------------------------------|
| Capacitor 22 pF 50V (NPO) Ceramic   | 2  | RES 0603                 | C1005,C1006   | AVX:06035A220JAT2A                   |
| Capacitor 39 pf 25V Ceramic         | 1  | RES 0603                 | C1008   | AVX:06033C390JAT2A                   |
| Capacitor 1nF 25V Ceramic           | 11 | RES 0603                 | C17,C23,C44,C46,C48,C50,C52,C54,C56,C58,C1003                             | Murata:<br>GRM188R71E102KA01D        |
| Capacitor 0.1uf 25V Ceramic         | 16 | RES 0603                 | C1,C3,C6,C16,C18,C21,C22,C41,C1000,C1001,C1002,C1004,C1011,C              | Murata:<br>GRM188R71E104KA01D        |
| Capacitor 0.047uF 25V Ceramic       | 1  | RES 0603                 | C28   | AVX:06033A473JAT2A                   |
| Capacitor 0.01 uF 50V (X7R) Ceramic | 3  | RES 0603                 | C40,C1007,C1013   | AVX: 06035C103KAT2A                  |
| Capacitor 0.22uF 25V Ceramic        | 9  | RES 0603                 | C25,C30,C31,C32,C34,C35,C36,C37,C42                                       | TDK: C2012X8R1E224K                  |
| Capacitor 1.0uF 25V Ceramic         | 5  | RES 1206 0805            | C10,C11,C12,C13,C15   | TDK: C3216X7R1E105K                  |
| Capacitor 4.7uF 16V Tantalum        | 3  | CAP EIA B                | C1009,C1010,C1015   | Vishay/Sprague:<br>293D475X9016B2TE3 |
| Capacitor 10uF 16V Tantalum         | 4  | CAP EIA B                | C2,C4,C5,C38  | 293D106X9016B2TE3                    |
| Resistor 510 Ohm 5% 1/16W           | 4  | RES 0603                 | R1,R2,R1024,R1009   | Dale: CRCW0603511JNEA                |
| Resistor 4.7K Ohm 5% 1/16W          | 2  | RES 0603                 | R5,R6   | Dale: CRCW0603472JNEA                |
| Resistor 10K Ohm 5% 1/10W           | 14 | RES 0603                 | R7,R8,R27,R30,R1000,R1001,R1002,R1003,R1006,R1007,R1013,R1014,R1023,R1031 | Dale: CRCW060310K0FKEA               |
| Resistor 0 Ohm 5% 1/10W 0603 SMD    | 1  | RES 1206 0805            | R9  | Vishay/Dale:<br>CRCW08050000Z0EA     |
| Resistor 0 Ohm 5% 1/10W 0603 SMD    | 5  | RES 0603                 | R14,R1022,R1025,R1026,R1027   | Vishay/Dale:<br>CRCW06030000Z0EA     |
| Resistor 3.92K Ohm 1% 1/16W         | 1  | RES 0603                 | R28   | Dale: CRCW06033K92FKEA               |
| Resistor 3.3k Ohm 5% 1/8W           | 3  | RES 0805 0603            | R1017,R1018,R1020   | Dale: CRCW06033K30JNEA               |
| Resistor 100k Ohm 5% 1/8W           | 2  | RES 0805 0603            | R1004,R1005   | Dale: CRCW0805100KJNEA               |
| Resistor 10 Ohm 5% 1/4W             | 1  | RES 1206 0805            | R1029   | Dale: CRCW120610R0FKEA               |
| Resistor 1K Ohm 5% 1/8W             | 3  | RES 0603                 | R1028,R32,R1019   | Dale: CRCW0603102JNEA                |
| Resistor 4.99K Ohm 1% 1/8W          | 1  | RES 0805 0603            | R1021   | Dale: CRCW06034K99FKEA               |
| Resistor 40.2K Ohm 1% 1/8W          | 1  | RES 0805 0603            | R1015   | Dale: CRCW06034022FKEA               |
| Resistor 33 Ohm 1% 1/4 W Thick Film | 2  | RES 1206 0805            | R1010,R1011   | Dale: CRCW080533R0FKEA               |
| Resistor 680 Ohm 5% 1/8W            | 1  | RES 0805 0603            | R1012   | Dale: CRCW0603681JNEA                |
| Resistor 120 Ohm 5% 1/16W           | 1  | RES 0603                 | R4  | Dale: CRCW0603121JNEA                |
| Resistor 10 Ohm 5% 1/16W            | 1  | RES 0603                 | R3  | Dale: CRCW060310R0JNEA               |
| Resistor 1.5K Ohm 5% 1/8W           | 1  | RES 0805 0603            | R1008   | Dale: CRCW0603152JNEA                |
| Resistor 1M Ohm 5% 1/10W            | 2  | RES 0805 0603            | R10, R1016  | Dale: CRCW0603105JNEA                |
| Resistor 510 Ohm 5%                 | 1  | RESISTOR NETWORK EXB-38V | RP2   | CTS: 742C043511JP                    |
| Resistor 4.7K Ohm 5%                | 1  | RESISTOR NETWORK EXB-38V | RP1000  | CTS: 742C043473JP                    |



|  |            |                                   |                       |  |
|--|------------|-----------------------------------|-----------------------|--|
| Resistor 10K Ohm 5%  | 2          | RESISTOR NETWORK EXB-38V          | RP1,RP1001            | CTS: 742C043104JP                        |
| GF1A THRU GF1M   | 1          | DO-214BA                          | D1                    | Vishay: GF1A                             |
| 12 MHz HCM49 18pF SMT Crystal  | 1          | CRYSTAL SMT                       | X1000                 | Citizens: HCM49-12.000MABJ-UT            |
| Ferrite Bead 1.5A 26Ohm@100 MHz  | 4          | RES 1206 0805                     | L1000,L1001, FB1, FB2 | Steward: MI1206K260R-10;                 |
| Fuse 1.1A  | 1          | FUSE1                             | FUSE                  |  |
| UF32 Reference Design for PPCNexus (MC9S12UF32PUE preprogrammed w/P&E firmware) ROHS LEAD FREE | 1          | ISP TQFP100                       | U1006                 | P&E                                      |
| IRLML6402 P-Channel MOSFET   | 1          | SOT-23                            | U1014                 | International Rectifiers: IRLML6402PBFTR |
| TI Dual Tri-State Bus Buffer Gate SN74LVC2G126DCTRE4   | 3          | TI DCT8                           | U1009,U1010,U1013     | TI: SN74LVC2G126DCTR                     |
| TI Dual Tri-State Bus Buffer Gate SN74LVC2G125DCTRE4   | 2          | TI DCT8                           | U1003,U1008           | TI: SN74LVC2G125DCTRE4                   |
| Dual Channel Analog Switch   | 2          | TI DCT8                           | U1000,U1001           | TI: SN74LVC2G66DCTR                      |
| MC34164D   | 1          | SOIC8                             | U1005                 | OnSemi: MC34164D-5R2G                    |
| LM386  | 1          | SOIC8                             | U7                    | UTC:LM386                                |
| 28x2 Pass through vertical SMT header  | 1          | SSM-128-L-DV-BE-A-K MIRRORED      | J1                    | Samtec: SSM-128-L-DV-BE-A-K              |
| <b>Total Components Mounted On Bottom</b>  | <b>124</b> |                                   |                       |  |
| <b>Components Not Mounted</b>  | <b>5</b>   | U1002, U1004, U1007, U1011, U1012 |                       |  |