

| Zone 4X4 Board(Rev1.6) |          |                                                                                                                                                                                                                                                                                                              |                       |                           | Date:Jun. 21th, 2011           |
|------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|--------------------------------|
| Item                   | Quantity | Reference                                                                                                                                                                                                                                                                                                    | Part                  | PCB Footprint             | Notes                          |
| 1                      | 1        | C1                                                                                                                                                                                                                                                                                                           | 63V 100uF             | SM/CE                     |                                |
| 2                      | 1        | C2                                                                                                                                                                                                                                                                                                           | 10nF                  | SM/C_1206                 |                                |
| 3                      | 28       | C3,C5,C7,C8,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C26,C27,C28,C29,C30,C31,                                                                                                                                                                                     | 0.1uF                 | SM/C_1206                 |                                |
| 4                      | 2        | C4,C6                                                                                                                                                                                                                                                                                                        | 25V 68uF              | SM/CE                     |                                |
| 5                      | 2        | C9,C10                                                                                                                                                                                                                                                                                                       | 20pF                  | SM/C_1206                 |                                |
| 6                      | 1        | D1                                                                                                                                                                                                                                                                                                           | 50WQ06FN              | 50WQ06FN                  |                                |
| 7                      | 1        | D2                                                                                                                                                                                                                                                                                                           | RS1B                  | SM/D_MLL41_21             |                                |
| 8                      | 12       | D3,D6,D10,D16,D17,D19,D20,D21,D22,D26,D28,D33                                                                                                                                                                                                                                                                | RED LED               | LED_SMTA                  | RED                            |
| 9                      | 6        | D4,D11,D12,D13,D23,D30                                                                                                                                                                                                                                                                                       | YELLOW LED            | LED_SMTA                  | YELLOW                         |
| 10                     | 7        | D5,D9,D14,D15,D24,D31,D36                                                                                                                                                                                                                                                                                    | GREEN LED             | LED_SMTA                  | GREEN                          |
| 11                     | 1        | D7                                                                                                                                                                                                                                                                                                           | BLUE LED              | LED_SMTA                  | BLUE                           |
| 12                     | 4        | D8,D18,D27,D34                                                                                                                                                                                                                                                                                               | ORANGE LED            | LED_SMTA                  | ORANGE                         |
| 13                     | 4        | D25,D29,D32,D35                                                                                                                                                                                                                                                                                              | BICOLOR LED           | LED_BICOLOR               | RED&GREEN                      |
| 14                     | 28       | D37,D38,D39,D40,D41,D42,D45,D47,D49,D52,D57,D58,D60,D62,D64,D65,D66,D68,D69,D71,D73,D75,D77,D78,D80,D82,D84,D86                                                                                                                                                                                              | 1N4007                | SM/D_MLL41_21             |                                |
| 15                     | 17       | D43,D46,D48,D50,D55,D59,D61,D63,D67,D70,D72,D74,D76,D79,D81,D83,D85                                                                                                                                                                                                                                          | MMBZ5242B             | SM/D_1206_21_2            |                                |
| 16                     | 3        | D44,D53,D54                                                                                                                                                                                                                                                                                                  | BAS40-04/SOT          | SM/SOT23_123_BAS40-04     |                                |
| 17                     | 2        | D56,D51                                                                                                                                                                                                                                                                                                      | SMBJ6.8A              | SM/D_MLL41_21             |                                |
| 18                     | 1        | F1                                                                                                                                                                                                                                                                                                           | Littelfuse            | FUSE_3                    |                                |
| 19                     | 2        | F2,F3                                                                                                                                                                                                                                                                                                        | LP60-010              | RAD/250X.125/LS.200/034   |                                |
| 20                     | 1        | J1                                                                                                                                                                                                                                                                                                           | CON14A                | ETB7INCH_HOLESALLSCEWLESS | Terminal, 7pos(3+4), Gray.     |
| 21                     | 1        | J2                                                                                                                                                                                                                                                                                                           | 2 x 3pin, Male header | SIP/TML.300/3B            | 2 x 3 double row Header, black |
| 22                     | 1        | J3                                                                                                                                                                                                                                                                                                           | CON2                  | TWOPOSENSOR               |                                |
| 23                     | 3        | J4,J8,J10                                                                                                                                                                                                                                                                                                    | CON12A                | ETB6INCH_HOLESALLSCEWLESS | Terminal, 6pos(2+4), Gray.     |
| 24                     | 1        | J6                                                                                                                                                                                                                                                                                                           | CON16A                | ETB8INCH_HOLESALLSCEWLESS | Terminal, 8pos(4+4), Gray.     |
| 25                     | 1        | J7                                                                                                                                                                                                                                                                                                           | ETB3INCH              | ETB3INCH                  |                                |
| 26                     | 1        | J9                                                                                                                                                                                                                                                                                                           | SIP 2                 | SIP/TML.200/2             | SIP, 2pin, Jumper, black       |
| 27                     | 4        | J11,J12,J14,J15                                                                                                                                                                                                                                                                                              | CON6A                 | ETB3INCH_HOLESALLSCEWLESS | TERMINAL, 3pos, Gray           |
| 28                     | 1        | J13                                                                                                                                                                                                                                                                                                          | CON4A                 | ETB2INCH_HOLESALLSCEWLESS | TERMINAL, 2pos, Gray           |
| 29                     | 9        | K1,K2,K3,K4,K5,K6,K7,K8,K9                                                                                                                                                                                                                                                                                   | KLT1C12DC12/HASCO     | RELAYNT73                 |                                |
| 30                     | 1        | L1                                                                                                                                                                                                                                                                                                           | 180uH                 | SM/L_2222                 |                                |
| 31                     | 14       | MOV1,MOV2,MOV3,MOV4,MOV5,MOV6,MOV7,MOV8,MOV9,MOV10,MOV11,MOV12,MOV13,MOV14                                                                                                                                                                                                                                   | DNR(7D470)            | CPAX/MOV.100/LS.200/031   |                                |
| 32                     | 4        | Q1,Q2,Q3,Q4                                                                                                                                                                                                                                                                                                  | 2N2907                | SM/SOT23_123              |                                |
| 33                     | 4        | R1,R2,R3,R4                                                                                                                                                                                                                                                                                                  | 510                   | SM/R_1206                 |                                |
| 34                     | 4        | R5,R16,R18,R23                                                                                                                                                                                                                                                                                               | 100                   | SM/R_1206                 |                                |
| 35                     | 2        | R6,R7                                                                                                                                                                                                                                                                                                        | 0OHM                  | SM/R_1206                 |                                |
| 36                     | 7        | R8,R9,R10,R11,R12,R13,R14                                                                                                                                                                                                                                                                                    | 330                   | SM/R_1206                 |                                |
| 37                     | 3        | R15,R40,R44                                                                                                                                                                                                                                                                                                  | 10K 4PACK             | SM/R_1608_NET4            |                                |
| 38                     | 1        | R17                                                                                                                                                                                                                                                                                                          | 10M                   | SM/R_1206                 |                                |
| 39                     | 21       | R19,R22,R26,R29,R34,R37,R43,R48,R51,R54,R59,R63,R67,R69,R73,R76,R79,R84,R86,R89,R91                                                                                                                                                                                                                          | 5.6K                  | SM/R_1206                 |                                |
| 40                     | 17       | R20,R25,R28,R36,R41,R47,R53,R58,R62,R66,R70,R75,R78,R83,R87,R92,R94                                                                                                                                                                                                                                          | 2.2K                  | SM/R_1206                 |                                |
| 41                     | 17       | R21,R27,R32,R39,R42,R46,R50,R56,R61,R65,R68,R72,R77,R82,R85,R93,R97                                                                                                                                                                                                                                          | 1.0K                  | SM/R_1206                 |                                |
| 42                     | 1        | R24                                                                                                                                                                                                                                                                                                          | 10K-1%                | SM/R_1206                 |                                |
| 43                     | 3        | R30,R35,R38                                                                                                                                                                                                                                                                                                  | 30R 5%                | SM/R_1206                 |                                |
| 44                     | 2        | R98,R31                                                                                                                                                                                                                                                                                                      | 10K                   | SM/R_1206                 |                                |
| 45                     | 16       | R33,R45,R49,R52,R55,R57,R60,R64,R71,R74,R80,R81,R88,R90,R95,R96                                                                                                                                                                                                                                              | 2.4K                  | SM/R_1206                 |                                |
| 46                     | 1        | SW1                                                                                                                                                                                                                                                                                                          | UP PUSHBUTTON         | KEY134_4                  |                                |
| 47                     | 1        | SW2                                                                                                                                                                                                                                                                                                          | DOWN PUSHBUTTON       | KEY134_4                  |                                |
| 48                     | 1        | SW3                                                                                                                                                                                                                                                                                                          | THERMOSTAT PUSHBUTTON | KEY134_4                  |                                |
| 49                     | 1        | SW4                                                                                                                                                                                                                                                                                                          | PUSHBUTTON            | KEY134_4                  |                                |
| 50                     | 1        | SW5                                                                                                                                                                                                                                                                                                          | SW DIP-6              | DIPSLIDE_6                |                                |
| 51                     | 1        | U1                                                                                                                                                                                                                                                                                                           | LM2674M-12            | 8SOP150_M                 |                                |
| 52                     | 1        | U2                                                                                                                                                                                                                                                                                                           | SMARTZONE2&4          | DISPLAY_SZ4               |                                |
| 53                     | 1        | U3                                                                                                                                                                                                                                                                                                           | LM340S-5.0V           | LM340S-5.0                |                                |
| 54                     | 2        | U4,U7                                                                                                                                                                                                                                                                                                        | DS2003                | 16SOP150                  |                                |
| 55                     | 1        | U5                                                                                                                                                                                                                                                                                                           | MC9S08AW60 CFUE       | QFP64/MC9S08AW60          |                                |
| 56                     | 1        | U6                                                                                                                                                                                                                                                                                                           | Max1487.5V            | 8SOP150                   |                                |
| 57                     | 1        | Y1                                                                                                                                                                                                                                                                                                           | 9.8304MHz             | SM/CRYSTAL1               |                                |
| NO POPULATE            |          |                                                                                                                                                                                                                                                                                                              |                       |                           |                                |
| 59                     | 1        | J5                                                                                                                                                                                                                                                                                                           | CON3                  | DELUXEPCB1                |                                |
| 60                     | 62       | TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP14,TP15,TP16,TP17,TP18,TP19,TP20,TP21,TP22,TP23,TP24,TP25,TP26,TP27,TP28,TP29,TP30,TP31,TP32,TP33,TP34,TP35,TP36,TP37,TP38,TP39,TP40,TP41,TP42,TP43,TP44,TP45,TP46,TP47,TP48,TP49,TP50,TP51,TP52,TP53,TP54,TP55,TP56,TP57,TP58,TP59,TP60,TP61,TP62 | TEST POINT_2          | TP                        |                                |