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April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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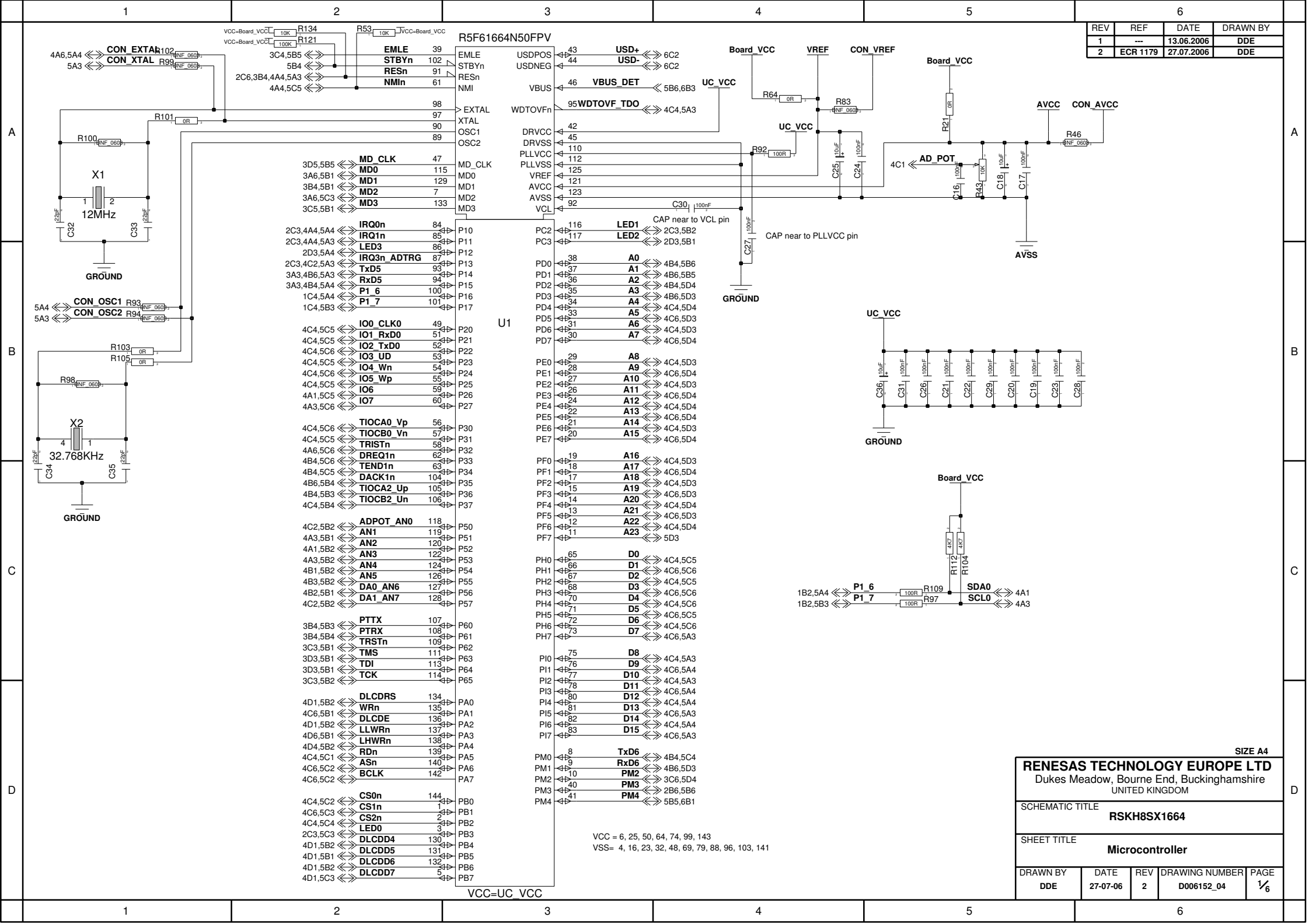
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| REV | REF | DATE | DRAWN BY |
|-----|----------|------------|----------|
| 1 | --- | 13.06.2006 | DDE |
| 2 | ECR 1179 | 27.07.2006 | DDE |



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|-----|-------------|-----|------------|---------|
| 39 | EMLE | 43 | USD+ | 6C2 |
| 102 | STBYn | 44 | USD- | 6C2 |
| 91 | RESn | 46 | VBUS_DET | 5B6,6B3 |
| 61 | NMIIn | 95 | WDTOVF_TDO | 4C4,5A3 |
| 98 | EXTAL | 42 | DRVCC | |
| 97 | XTAL | 45 | DRVSS | |
| 90 | OSC1 | 110 | PLLVCC | |
| 89 | OSC2 | 112 | PLLSS | |
| 47 | MD_CLK | 125 | VREF | |
| 115 | MD0 | 121 | AVCC | |
| 129 | MD1 | 123 | AVSS | |
| 7 | MD2 | 92 | VCL | |
| 133 | MD3 | 116 | PC2 | LED1 |
| 84 | IRQ0n | 117 | PC3 | LED2 |
| 85 | IRQ1n | 38 | PD0 | A0 |
| 86 | LED3 | 37 | PD1 | A1 |
| 87 | IRQ3n_ADTRG | 36 | PD2 | A2 |
| 87 | IRQ3n_ADTRG | 35 | PD3 | A3 |
| 93 | TxD5 | 34 | PD4 | A4 |
| 94 | RxD5 | 33 | PD5 | A5 |
| 100 | P1_6 | 31 | PD6 | A6 |
| 101 | P1_7 | 30 | PD7 | A7 |
| 49 | IO0_CLK0 | 29 | PE0 | A8 |
| 51 | IO1_RxD0 | 28 | PE1 | A9 |
| 52 | IO2_TxD0 | 27 | PE2 | A10 |
| 53 | IO3_UD | 26 | PE3 | A11 |
| 54 | IO4_Wn | 24 | PE4 | A12 |
| 55 | IO5_Wp | 22 | PE5 | A13 |
| 59 | IO6 | 21 | PE6 | A14 |
| 60 | IO7 | 20 | PE7 | A15 |
| 56 | TIOCA0_Vp | 19 | PF0 | A16 |
| 57 | TIOC80_Vn | 18 | PF1 | A17 |
| 58 | TRISTn | 17 | PF2 | A18 |
| 62 | DREQ1n | 15 | PF3 | A19 |
| 63 | TEND1n | 14 | PF4 | A20 |
| 104 | DACK1n | 13 | PF5 | A21 |
| 105 | TIOCA2_Up | 12 | PF6 | A22 |
| 106 | TIOC22_Un | 11 | PF7 | A23 |
| 118 | ADPOT_AN0 | 65 | PH0 | D0 |
| 119 | AN1 | 66 | PH1 | D1 |
| 120 | AN2 | 67 | PH2 | D2 |
| 122 | AN3 | 68 | PH3 | D3 |
| 123 | AN4 | 70 | PH4 | D4 |
| 124 | AN5 | 71 | PH5 | D5 |
| 126 | AN6 | 72 | PH6 | D6 |
| 127 | DA0_AN6 | 73 | PH7 | D7 |
| 128 | DA1_AN7 | 75 | PI0 | D8 |
| 107 | PTTX | 76 | PI1 | D9 |
| 108 | PTRX | 77 | PI2 | D10 |
| 109 | TRSTn | 78 | PI3 | D11 |
| 111 | TMS | 80 | PI4 | D12 |
| 113 | TDI | 81 | PI5 | D13 |
| 114 | TCK | 82 | PI6 | D14 |
| 114 | TCK | 83 | PI7 | D15 |
| 134 | DLCDRS | 8 | PM0 | TxD6 |
| 135 | WRn | 9 | PM1 | RxD6 |
| 136 | DLCDE | 10 | PM2 | PM2 |
| 137 | LLWRn | 40 | PM3 | PM3 |
| 137 | LLWRn | 41 | PM4 | PM4 |
| 138 | LHWRn | | | |
| 139 | RDn | | | |
| 140 | ASn | | | |
| 140 | ASn | | | |
| 142 | BCLK | | | |
| 144 | CS0n | | | |
| 1 | CS1n | | | |
| 2 | CS2n | | | |
| 3 | LED0 | | | |
| 130 | DLCDD4 | | | |
| 131 | DLCDD5 | | | |
| 132 | DLCDD6 | | | |
| 5 | DLCDD7 | | | |

VCC = 6, 25, 50, 64, 74, 99, 143
 VSS= 4, 16, 23, 32, 48, 69, 79, 88, 96, 103, 141

SIZE A4

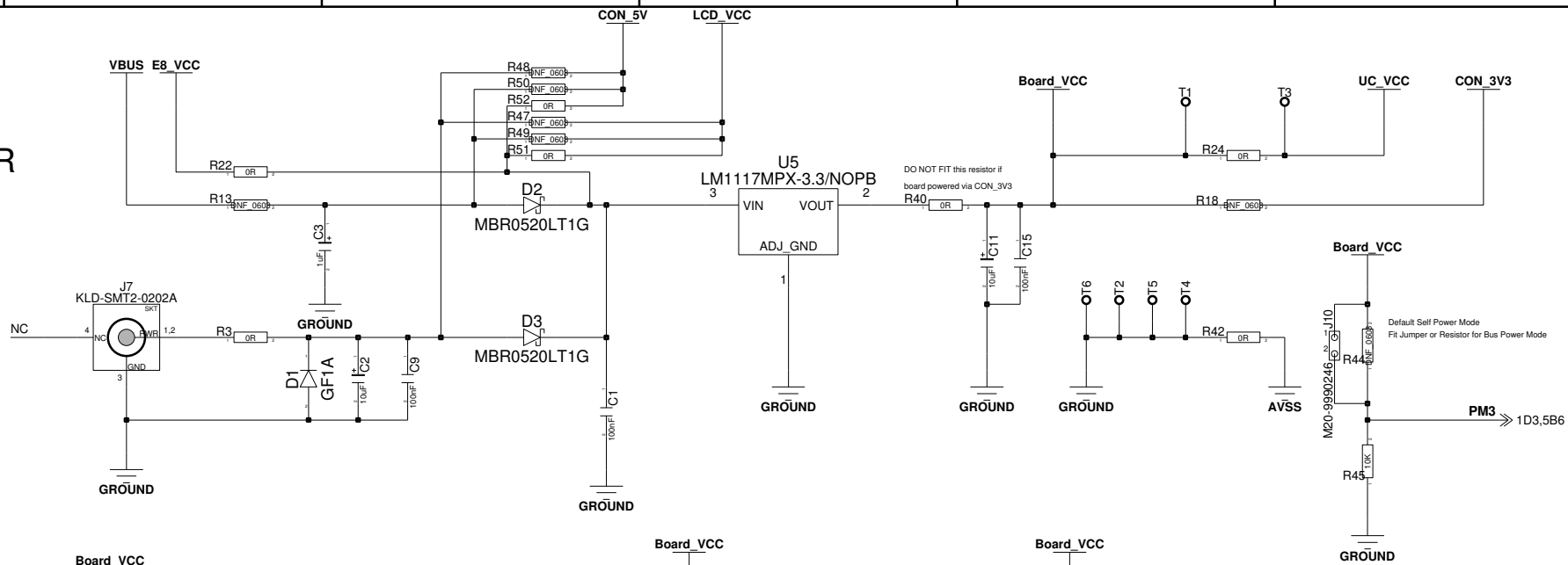
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SCHEMATIC TITLE
RSKH8SX1664

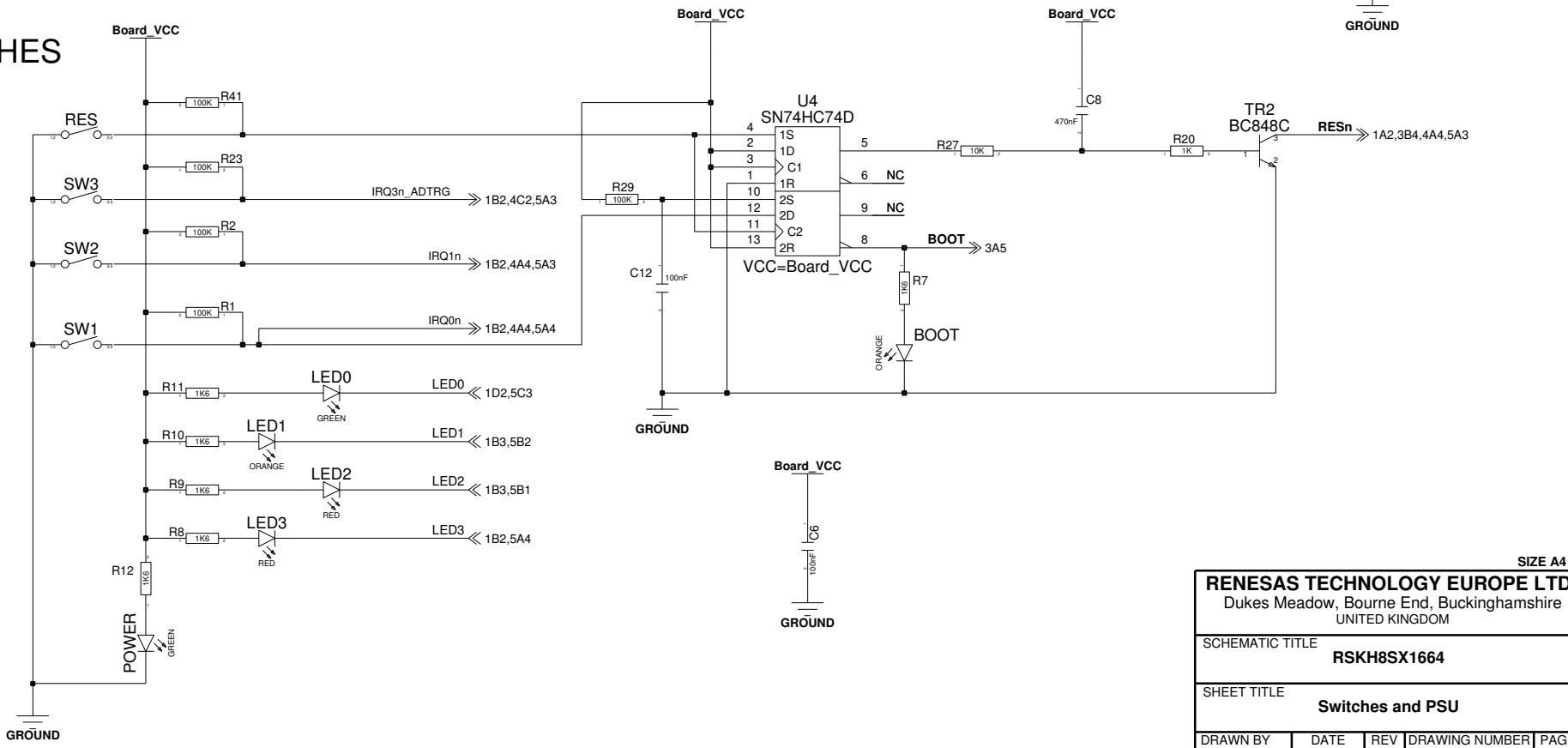
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Microcontroller

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POWER



SWITCHES



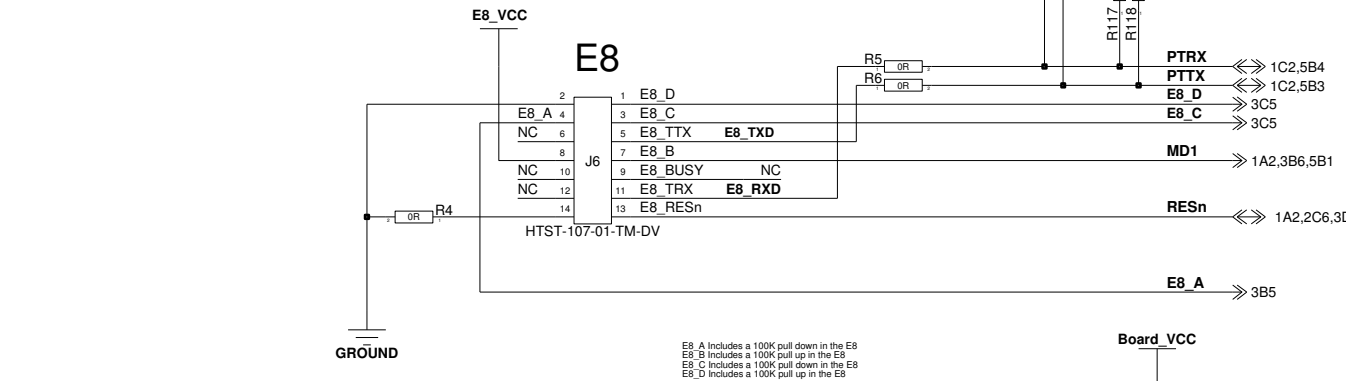
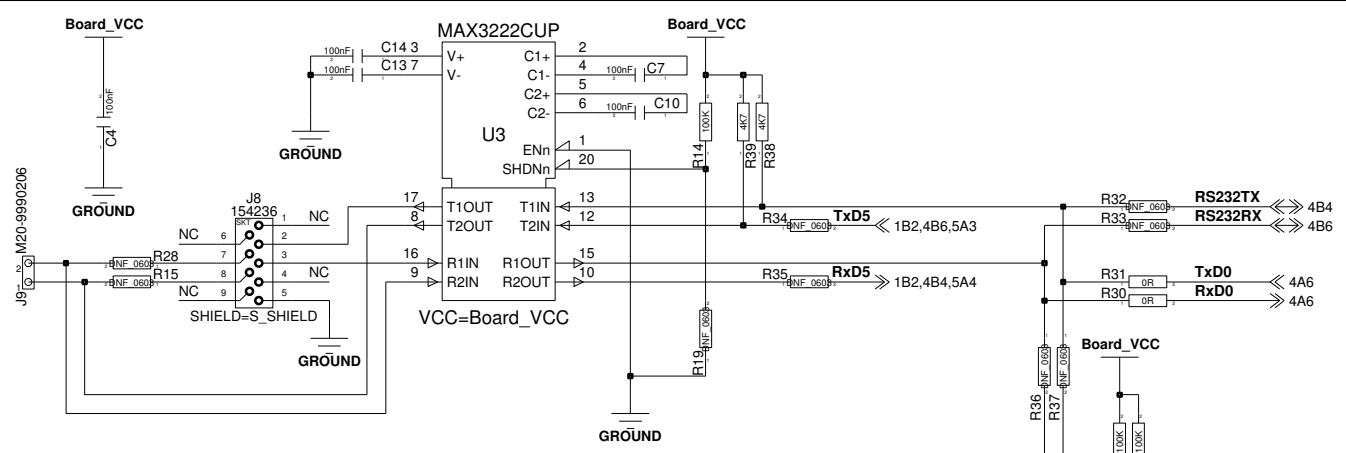
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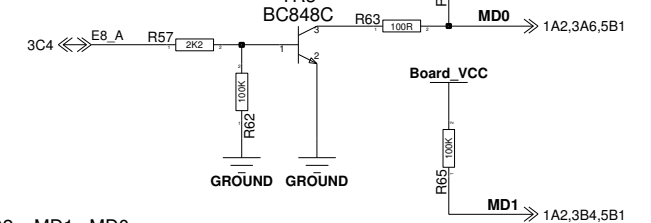
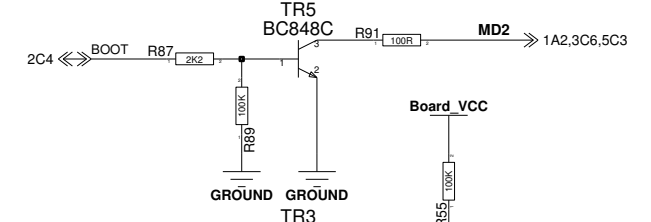
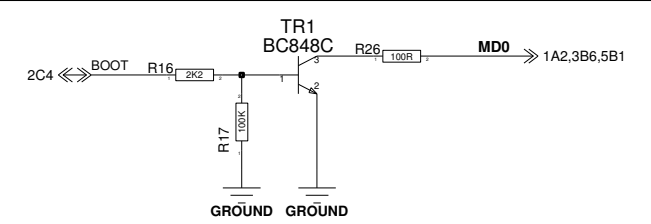
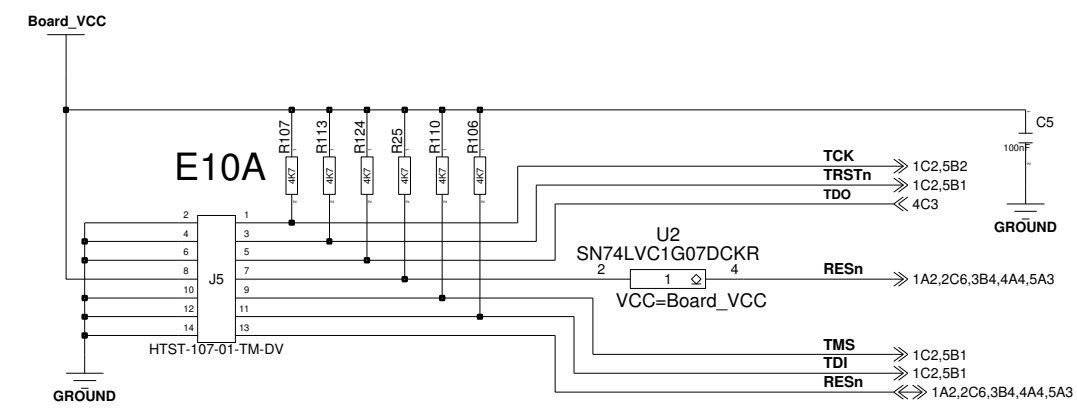
SCHEMATIC TITLE
RSKH8SX1664

SHEET TITLE
Switches and PSU

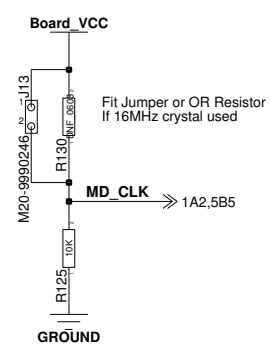
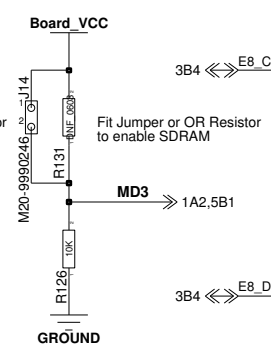
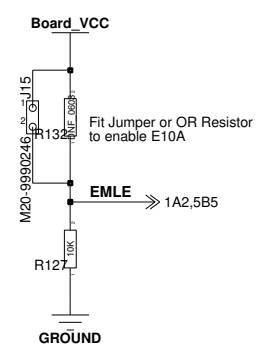
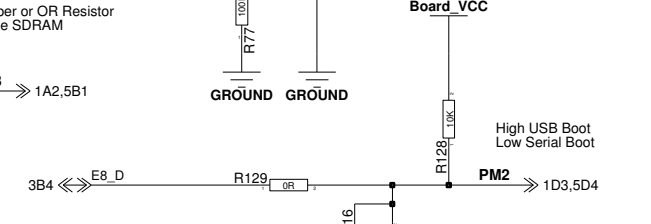
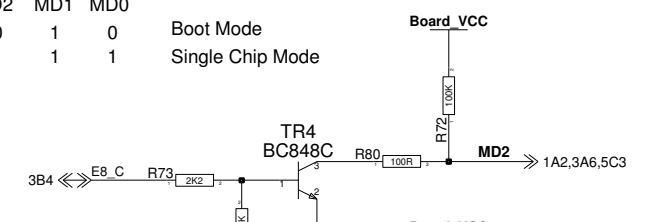
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E8 A includes a 100K pull down in the E8
 E8 B includes a 100K pull up in the E8
 E8 C includes a 100K pull down in the E8
 E8 D includes a 100K pull up in the E8



| | | | |
|-----|-----|-----|------------------|
| MD2 | MD1 | MD0 | Boot Mode |
| 0 | 1 | 0 | Single Chip Mode |
| 1 | 1 | 1 | |



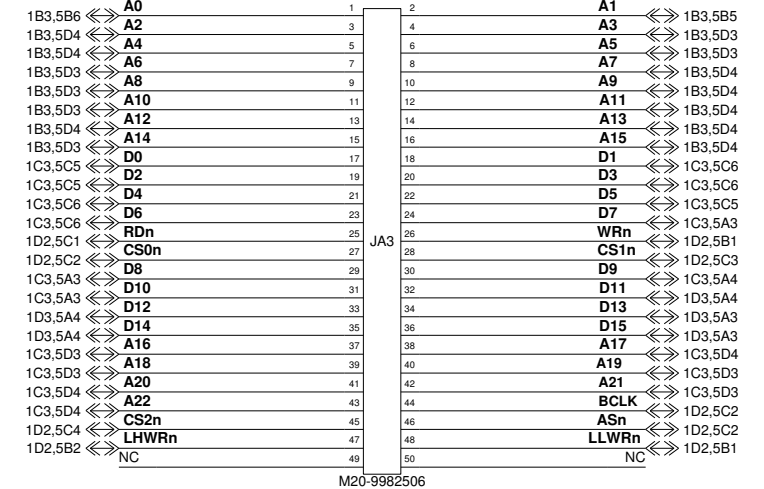
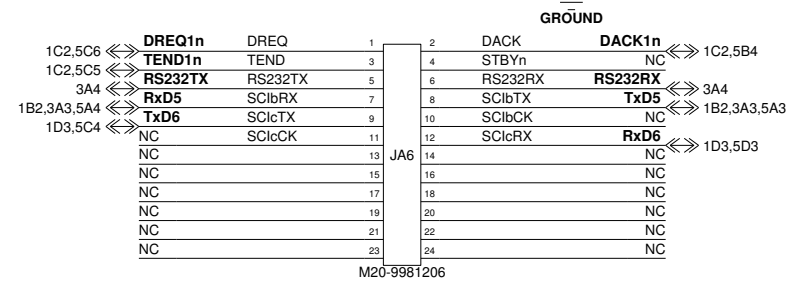
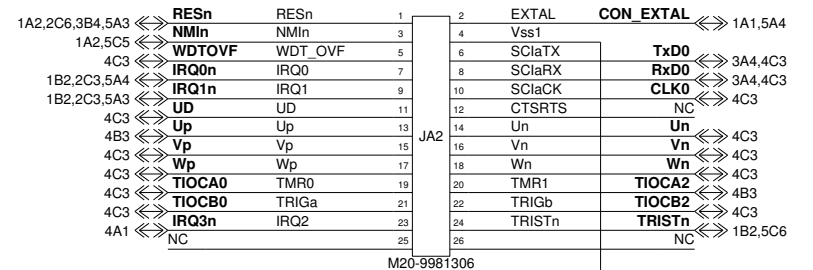
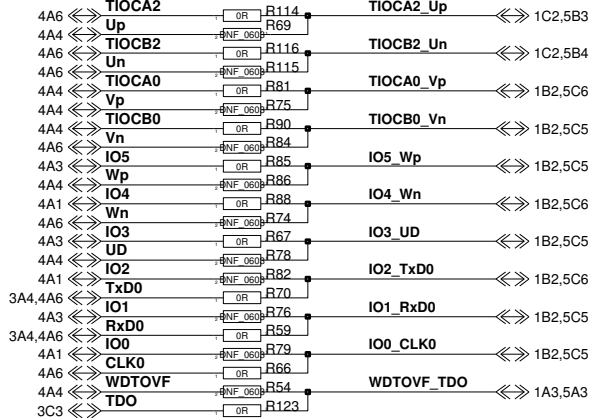
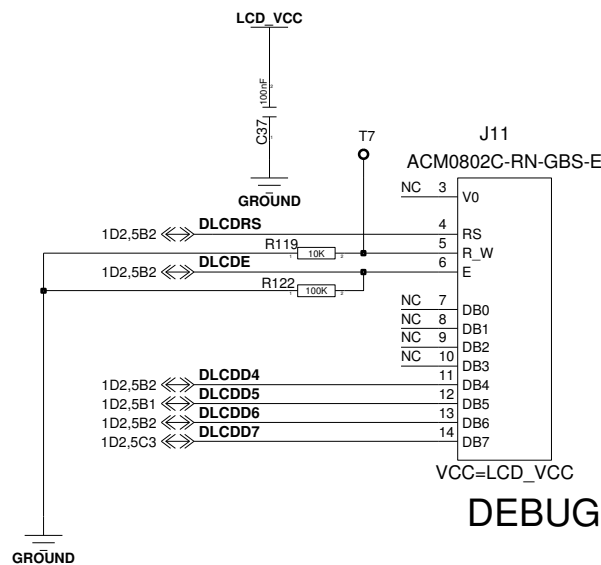
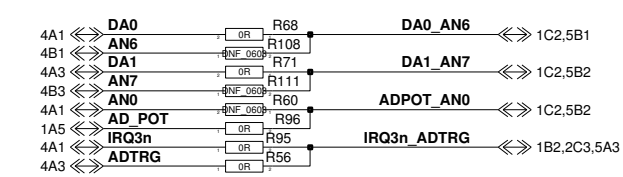
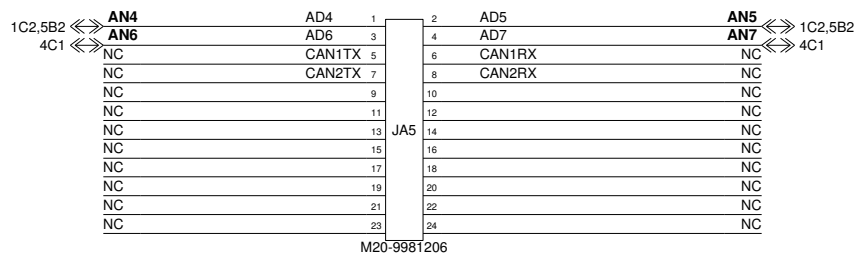
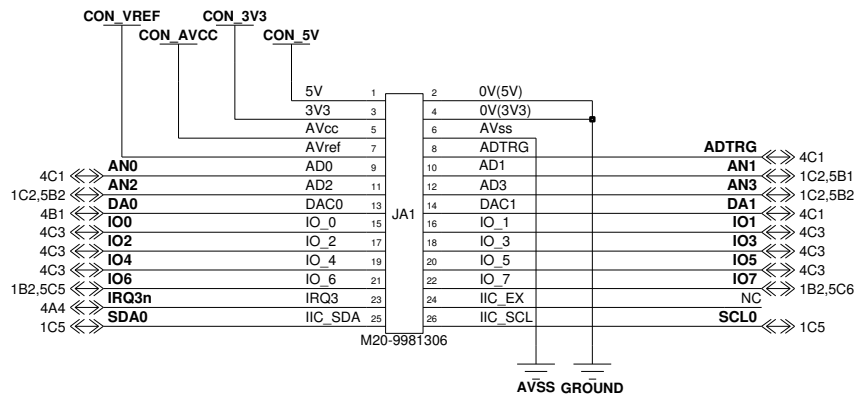
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SCHEMATIC TITLE
RSKH8SX1664

SHEET TITLE
E8 & E10A Debug connectors & Serial Port

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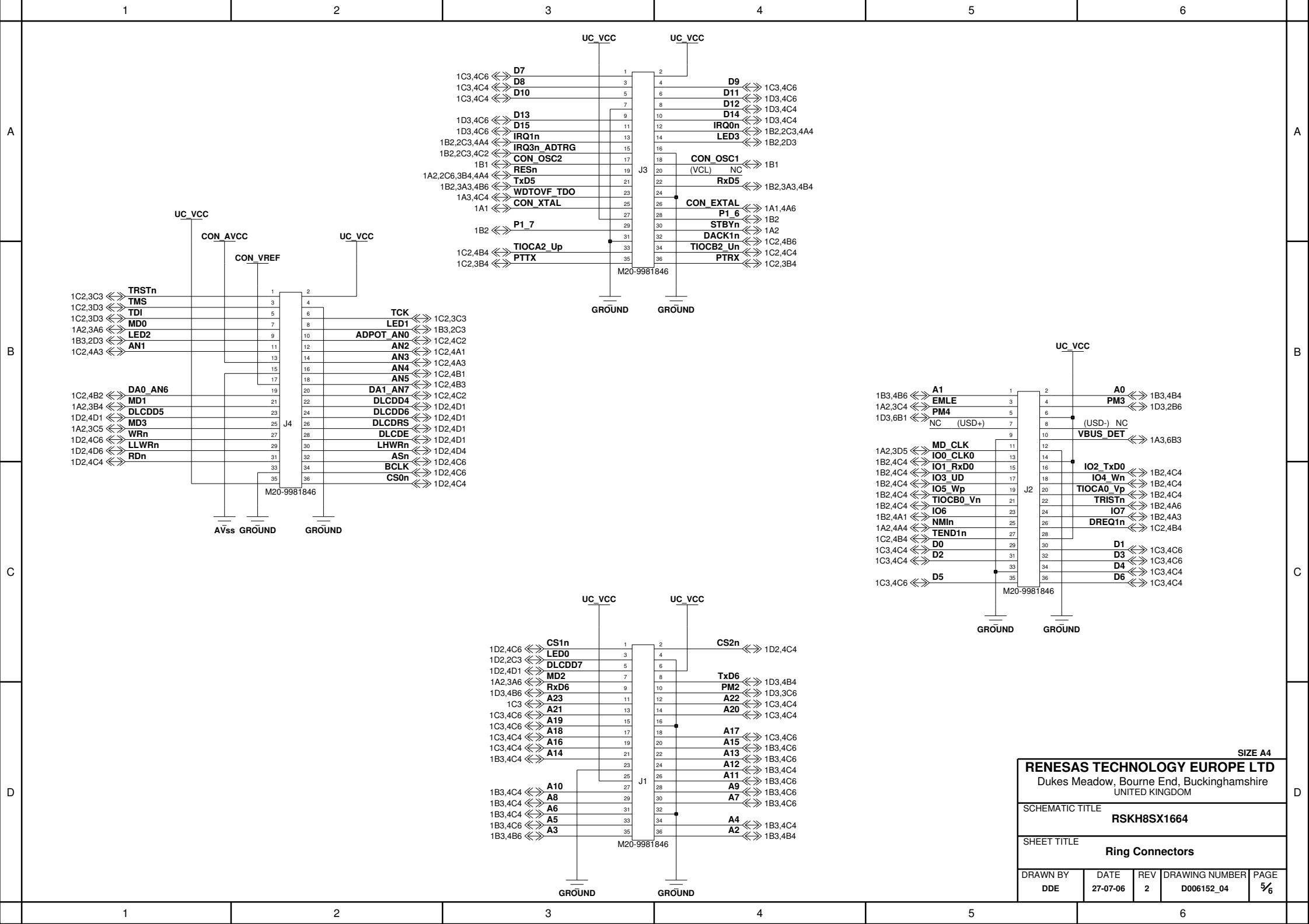
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SCHEMATIC TITLE
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SHEET TITLE
Application Headers

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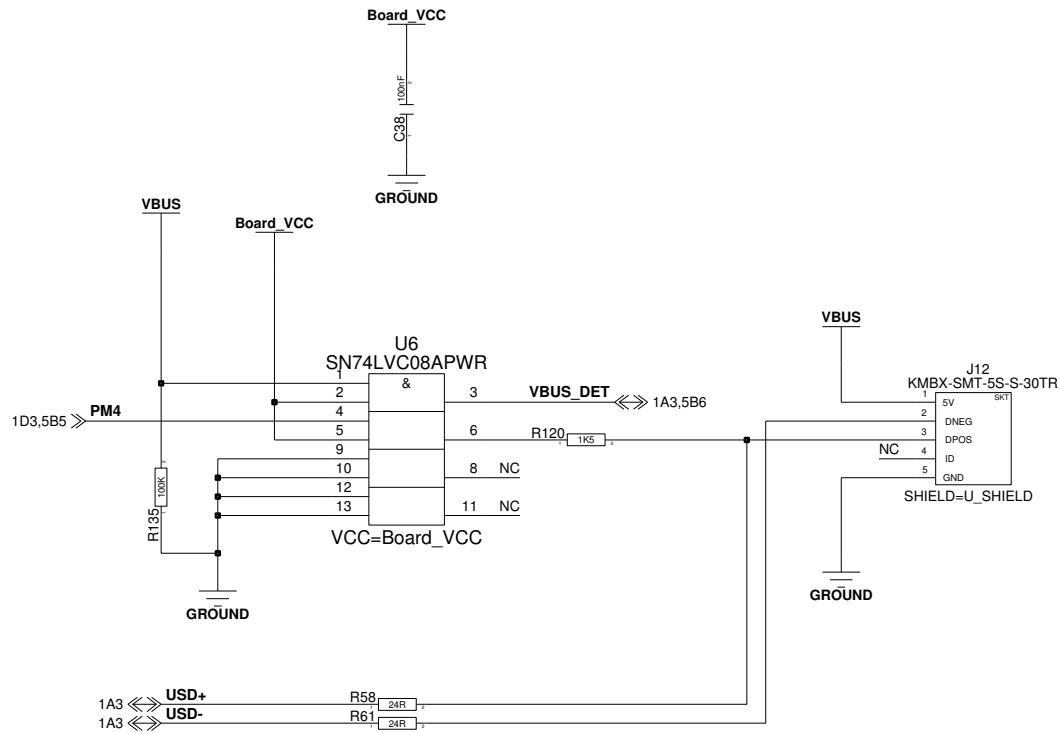
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SCHEMATIC TITLE
RSKH8SX1664

SHEET TITLE
Ring Connectors

| | | | | |
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| RSKH8SX1664 | | | | |
| SHEET TITLE | | | | |
| USB | | | | |
| DRAWN BY | DATE | REV | DRAWING NUMBER | PAGE |
| DDE | 27-07-06 | 2 | D006152_04 | 6/6 |