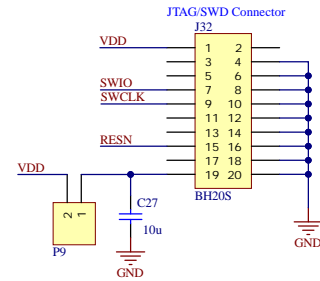
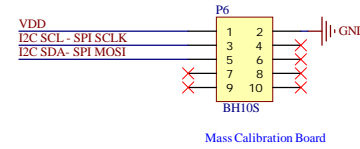
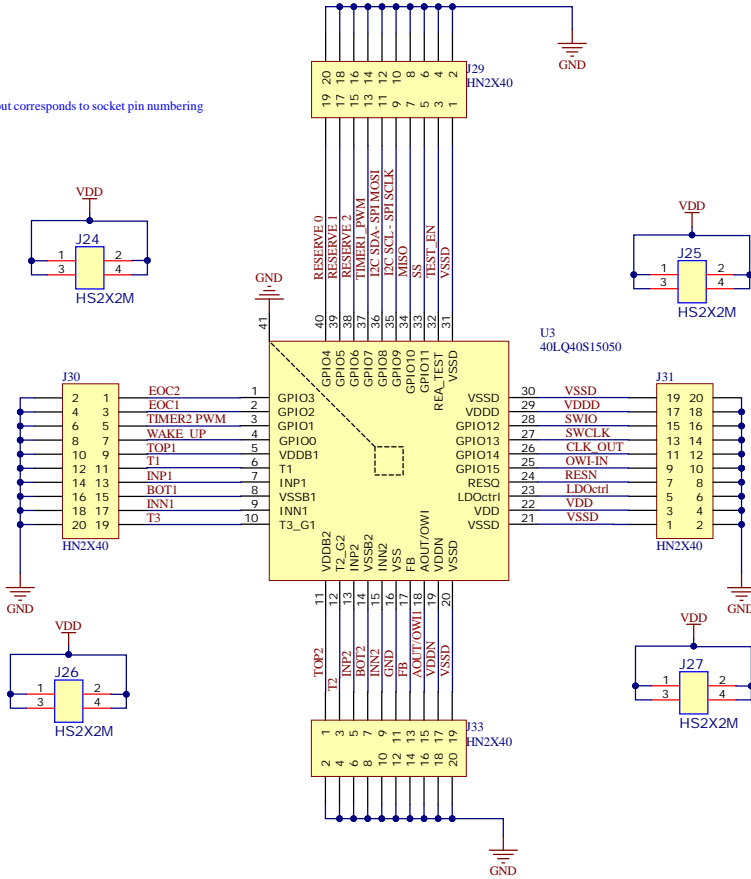
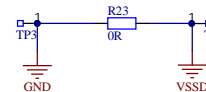
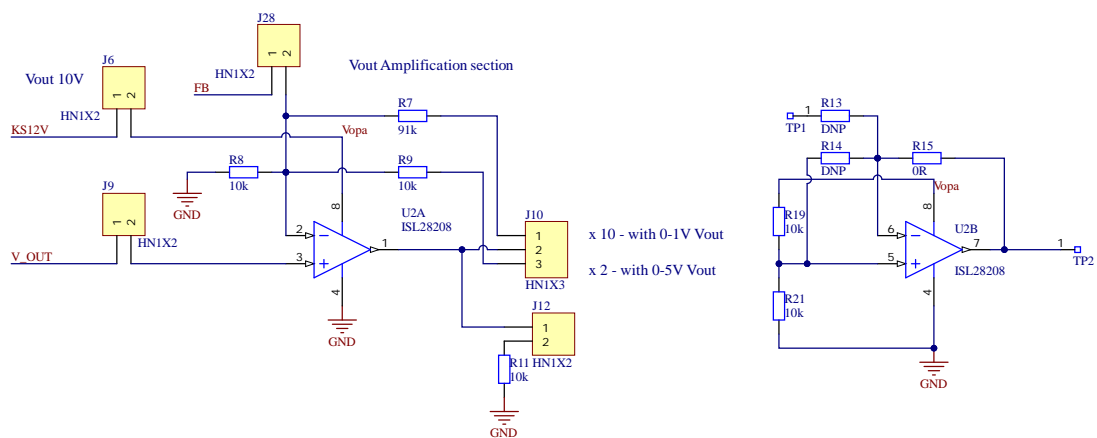
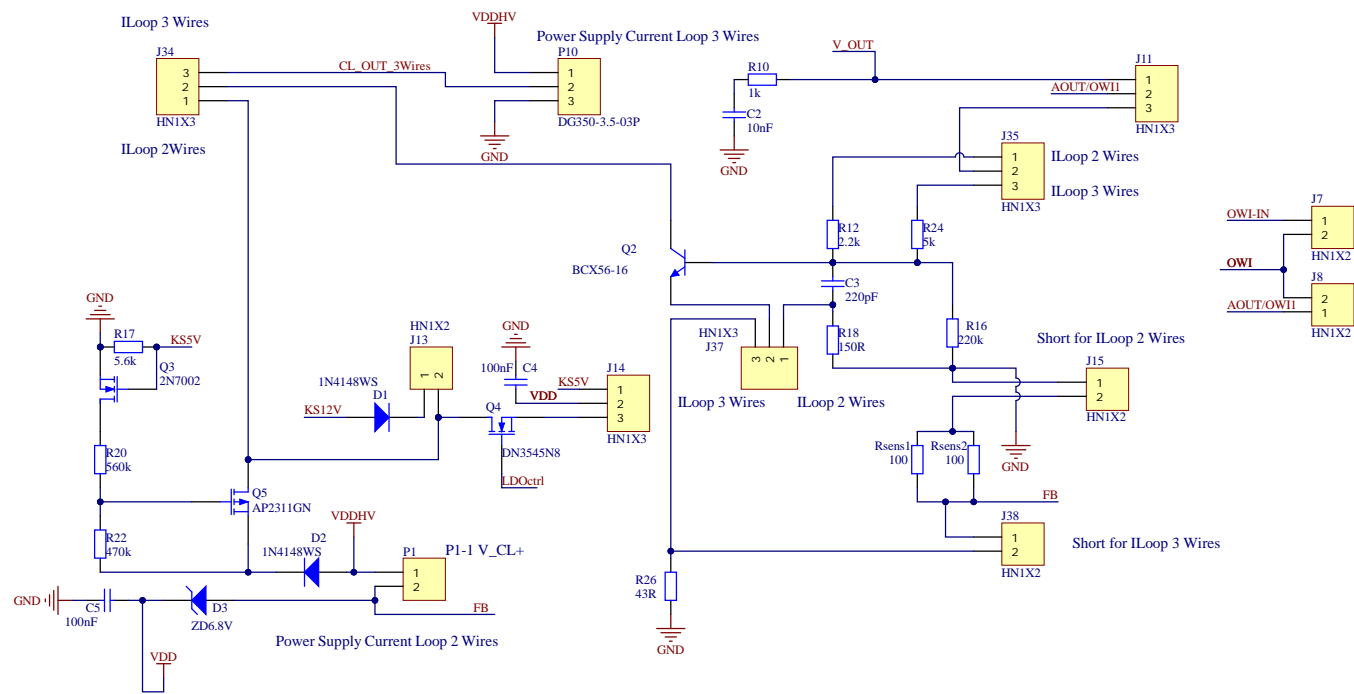


ZSSC328X QFN40 pinout corresponds to socket pin numbering



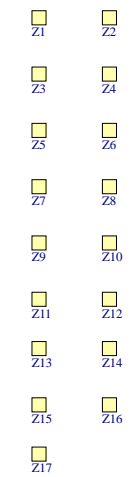
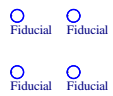
READ NOTES ON GNDS CONNECTIONS



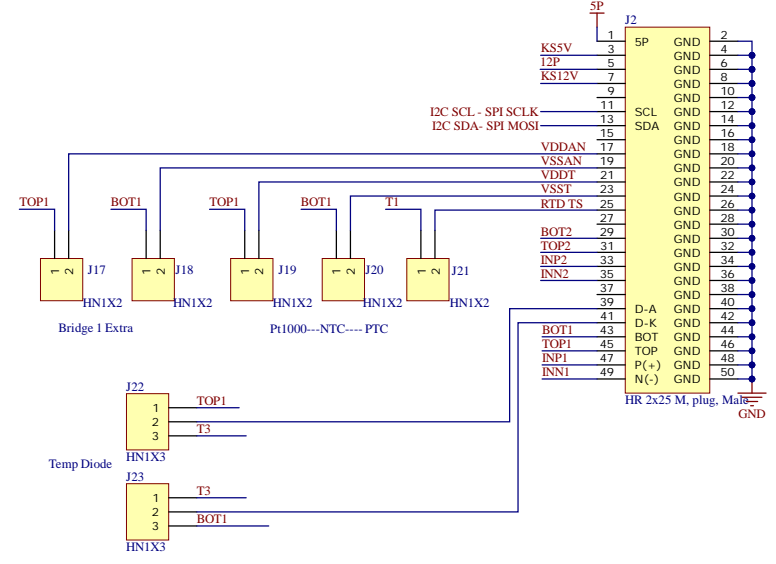
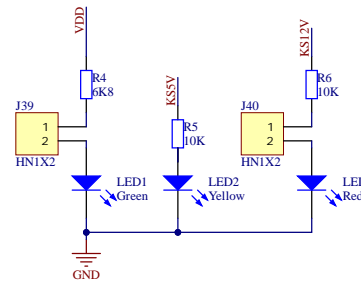
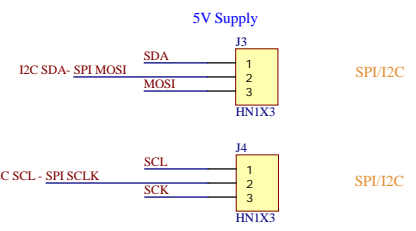


| | |
|------------|------------|
| J1 | |
| 5P | 1 SP |
| GND | 2 GND |
| K55V | 3 K55V |
| GND | 4 GND |
| I2P | 5 I2P |
| GND | 6 GND |
| GND | 7 KS12V |
| KS12V | 8 |
| VDD-LS | 9 |
| VPP | 10 |
| KSLS | 11 SCL |
| SCL | 12 |
| SCL LS | 13 SDA |
| SDA | 14 |
| SDA LS | 15 SS |
| PB0 / SS | 16 |
| SS LS | 17 MOSI |
| PB2 / MOSI | 18 |
| MOSI LS | 19 MISO |
| PB3 / MISO | 20 |
| MISO LS | 21 SCK |
| PB1 / SCK | 22 |
| SCK LS | 23 |
| LIN | 24 GND |
| GND | 25 OWI |
| OWI | 26 |
| OWI LS | 27 |
| ADC1 | 28 Reset |
| PE7 | 29 |
| LINw | 30 |
| PE6 | 31 |
| ADC3 | 32 TEST EN |
| PE5 | 33 |
| ADC4 | 34 |
| PE4 | 35 |
| PE0 / RXD0 | 36 |
| PE3 / AIN1 | 37 |
| PE1 / TXD0 | 38 |
| PE2 / AIN0 | 39 |
| TR_PD2 | 40 GND |
| GND | 41 EOC1 |
| PD3 / INT1 | 42 |
| PD3 LS | 43 EOC2 |
| PD4 / OC1B | 44 |
| PB7 | 45 |
| PD5 / OC1A | 46 |
| PB6 | 47 |
| PD6 / ICP | 48 |
| PB5 | 49 |
| PD7 / OC2 | 50 |
| PB4 | 50 |

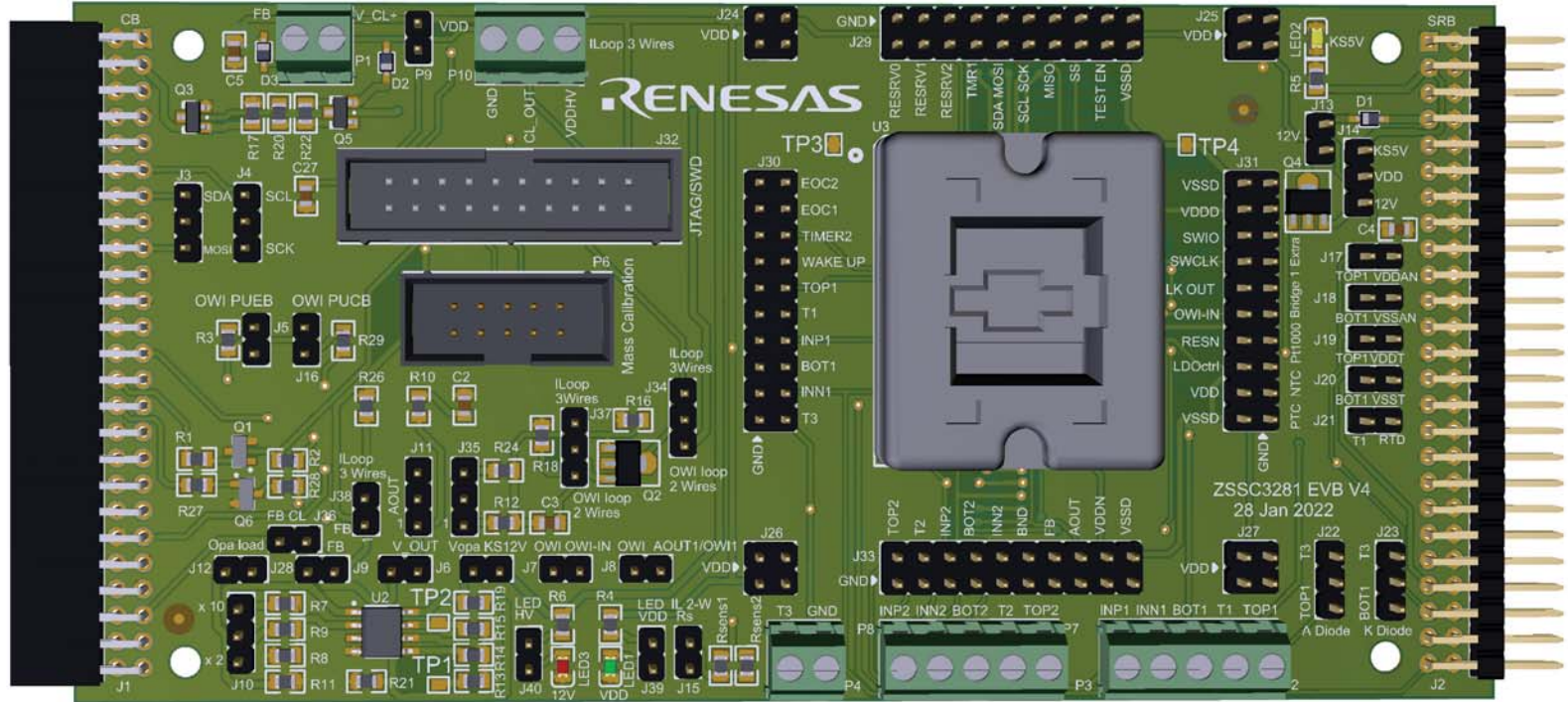
HR 2x25 F, receptacle, Female



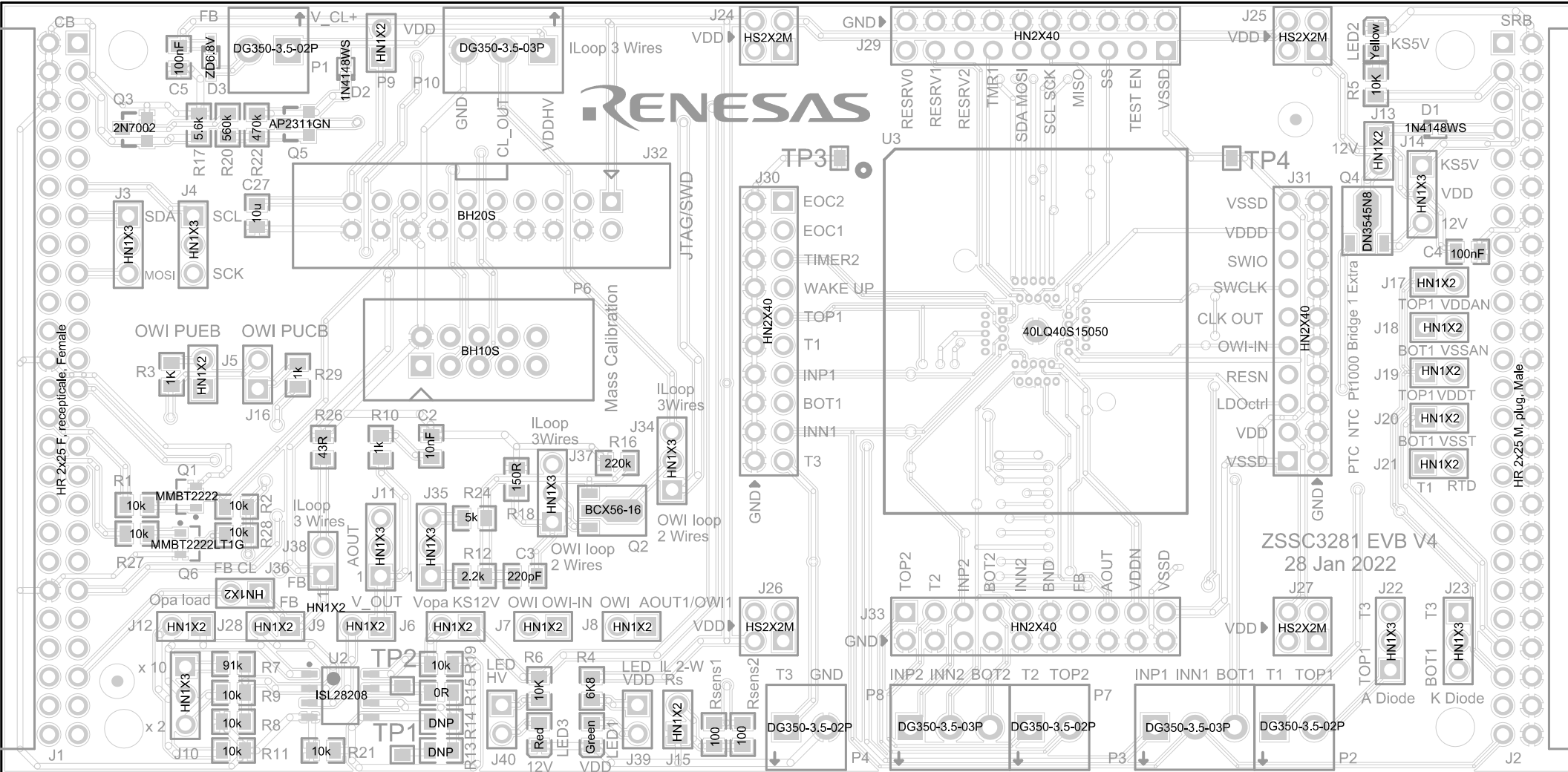
COMM BOARD Interface Selection via jumper settings



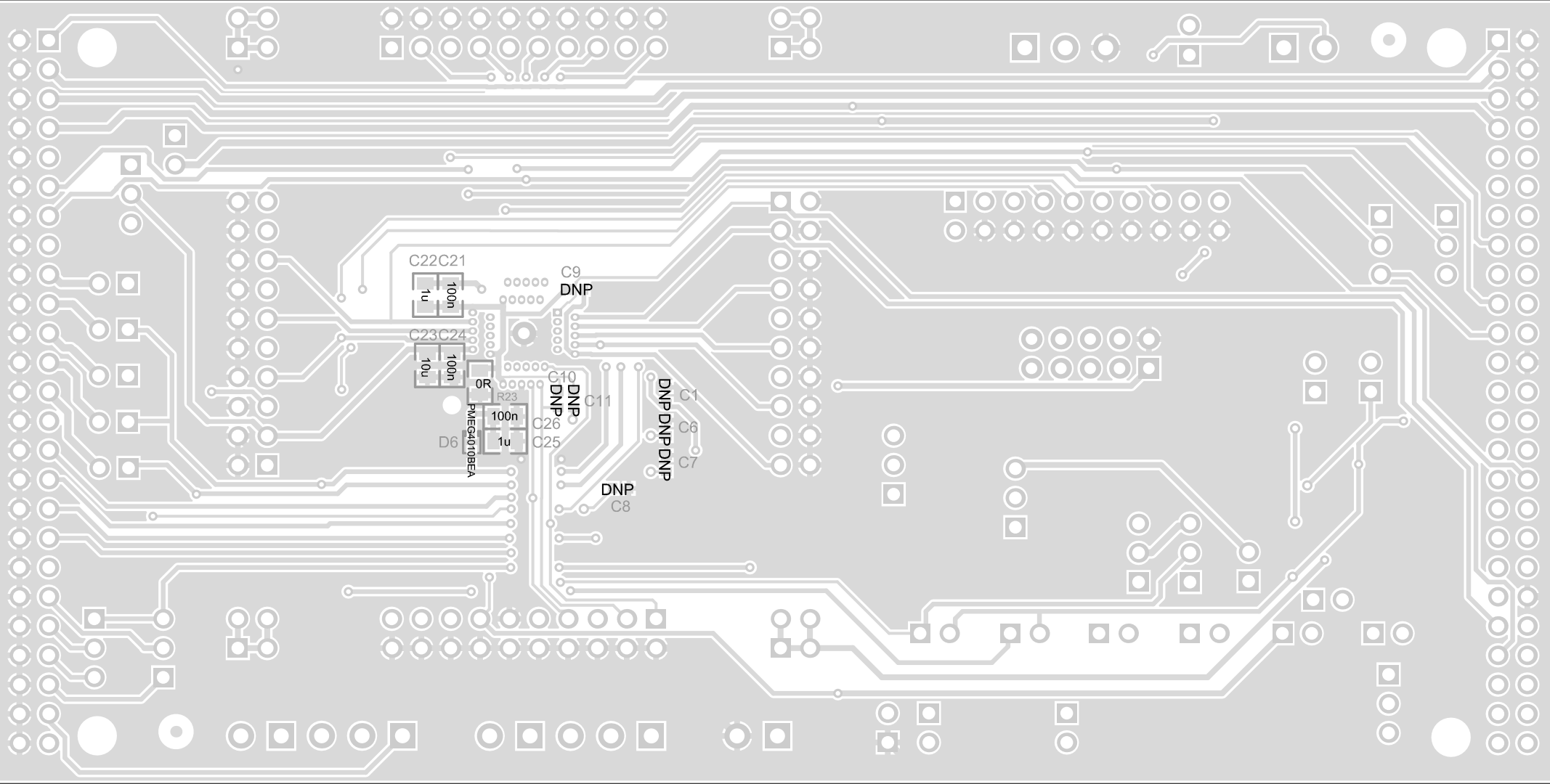
| | | | |
|-----------------------------------|---------------|------------------------|--------------------|
| Title: ZSSC3281 EVB Main | | | |
| Project: ZSSC3281 EVB | | | |
| Size: A3 | Sheet: 1 of 3 | Drawn by: G Kostadinov | Revision: V4 |
| File: ZSSC3281_EVB_V4_main.SchDoc | | | Date: 22.2.2022 r. |



RENESAS



ZSSC3281 EVB V4
28 Jan 2022



| Nr | Designator | Component description | Package | Manufacturer | Part Number | Order Code | Quantity |
|----|--|---|------------------------|---------------------------|-----------------------|------------------------------|----------|
| 1 | C1, C6, C7, C8, C9, C10, C11 | Do not Mount | C0805 | | NA | | |
| 2 | C2 | C0805 10nF 50V X7R 5% SAMSUNG | C0805 | SAMSUNG | CL21B103JBANNNC | C0805 10nF 50V X7R | 1 |
| 3 | C3 | C0805 220pF 50V C0G SAMSUNG | C0805 | SAMSUNG | CL21C221JBNC | C0805 220pF 50V C0G SAMSUNG | 1 |
| 4 | C4, C5 | C0805 100nF 50V X7R SAMSUNG | C0805 | SAMSUNG ELECTRO-MECHANICS | CL21B104KBNC | C0805 100nF 50V X7R SAMSUNG | 2 |
| 5 | C21, C24, C26 | C0805 100nF 50V X7R SAMSUNG | C0805 | SAMSUNG ELECTRO-MECHANICS | CL21B104KBNC | C0805 100nF 50V X7R SAMSUNG | 3 |
| 6 | C22, C25 | C0805 1.0uF 100V X7S 10% Mur | C0805 | MURATA | GRJ21BC72A105KE 11L | C0805 1.0uF 100V X7S 10% Mur | 2 |
| 7 | C23, C27 | C0805 10uF 16V X5R SAMSUNG | C0805 | SAMSUNG ELECTRO-MECHANICS | CL21A106KOQNNNE | C0805 10uF 16V X5R SAMSUNG | 2 |
| 8 | D1, D2 | 75V 300mA 4ns 2pF | SOD323 | DIODES/ZETEX | 1N4148WS-7-F | 1N4148WS | 2 |
| 9 | D3 | ZD6.8V 0.2W ROHM SMD | SOD323 | ROHM | UDZSTE-176.8B | ZD6.8V 0.2W ROHM SMD | 1 |
| 10 | D6 | Schottky 40V 1A | SOD323 | NEXPERIA | PMEG4010BEA | Schottky 40V 1A | 1 |
| 11 | F1, F2, F3, F4 | Fiducial | | | | | 4 |
| 12 | J1 | 2x 25-pin socket terminal strip, angled, RM 2.54 | HR2X25M | N.A | N.A | BL 2X25W 2,54 | 1 |
| 13 | J2 | 2 x 25-pin header, angled, pitch 2.54 | HR2X25F | N.A | N.A | SL 2X25W 2,54 | 1 |
| 14 | J3, J4, J10, J11, J14, J22, J23, J34, J35, J37 | HN1X3 | HS1X3M | CVILUX | CH31032V200 | HN1X3 | 10 |
| 15 | J5, J6, J7, J8, J9, J12, J13, J15, J16, J17, J18, J19, J20, J21, J28, J36, J38, J39, J40 | HN1X2 | HS1X2M | 3M | 961102-6404-AR | HN1X2 3M | 19 |
| 16 | J24, J25, J26, J27 | HS2X2M | HS2X2M | CVILUX | HS2X2M (CUT) | HN2X40 (CUT) | 4 |
| 17 | J29, J30, J31, J33 | HN2X40 | HS2X10M | CVILUX | HN2X40 | HN2X40 (CUT) | 4 |
| 18 | J32 | BH20S | BH20S | CVILUX | CH87202V200 | CH87202V200 | 1 |
| 19 | LED1 | KP-2012ZGC | 805 | KINGBRIGHT | KP-2012ZGC | KP-2012ZGC | 1 |
| 20 | LED2 | OSY50805C1E | LED0805 Y 3D | OPTOSUPPLY INTERNATIONAL | OSY50805C1E | OSY50805C1E | 1 |
| 21 | LED3 | OSR50805C1E | LED0805 R 3D | OPTOSUPPLY INTERNATIONAL | OSR50805C1E | OSR50805C1E | 1 |
| 22 | P1, P2, P4, P7 | DG350-3.5-02P | HDR 1x2 | DEGSON | DG350-3.5-02P-14-00AH | DG350-3.5-02P | 4 |
| 23 | P3, P8, P10 | DG350-3.5-03P | HDR 1x3 | DEGSON | DG350-3.5-03P-14-00AH | 5866 | 3 |
| 24 | P6 | BH10S | BH10S | CVILUX | CH87102V200 | CH87102V200 | 1 |
| 25 | P9 | HN1X2 | HS1X2M | CVILUX | CH31022V200 | HN1X2 | 1 |
| 26 | Q1 | MMBT2222LT1G. - Bipolar (BJT) Single Transistor, General Purpose, NPN, 30 V, 250 MHz, 225 mW, 600 mA, 250 hFE | ONSC-SOT-23-3-318-08_L | ON SEMICONDUCTOR | MMBT2222ALT1G | 1459098 | 1 |
| 27 | Q2 | BCX56-16 | SOT89 | DIODES/ZETEX | BCX5616TC | BCX56-16 | 1 |
| 28 | Q3 | 2N7002 | SOT23 | ON SEMICONDUCTOR | 2N7002LT1G | 2N7002 | 1 |
| 29 | Q4 | DN3545N8-G - MOSFET Transistor, N Channel, 200 mA, 450 V, 20 ohm, 0 V | SOT89 | MICROCHIP | DN3545N8-G | 2450518 | 1 |

| | | | | | | | |
|----|--|---|--------------------------------|---------------------------------|-----------------|--------------------------|----|
| 30 | Q5 | AP2311GN | SOT23 | ADVANCED POWER ELECTR. CO | AP2311GN-HF-3TR | AP2311GN | 1 |
| 31 | Q6 | MMBT2222LT1G. - Bipolar (BJT) Single Transistor, General Purpose, NPN, 30 V, 250 MHz, 225 mW, 600 mA, 250 hFE | ONSC-SOT- 23-3-318- 08_L | ON SEMICONDUCT OR | MMBT2222ALT1G | 1459098 | 1 |
| 32 | R1, R2, R5, R6, R8, R9, R11, R19, R21, R27, R28 | R0805 10K 5% | R0805 3D | UNI OHM | 0805S8J0103T50 | R0805 10K 5% | 11 |
| 33 | R3, R10, R29 | R0805 1.0K 5% | R0805 3D | UNI OHM | 0805S8J0102T50 | R0805 1.0K 5% | 3 |
| 34 | R4 | R0805 6.8K 5% | R0805 3D | UNI OHM | 0805S8J0682T50 | R0805 6.8K 5% | 1 |
| 35 | R7 | R0805 91K 5% | R0805 3D | UNI OHM | 0805S8J0913T50 | R0805 91K 5% | 1 |
| 36 | R12 | R0805 2.2K 5% | R0805 3D | UNI OHM | 0805S8J0222T50 | R0805 2.2K 5% | 1 |
| 37 | R13, R14 | DNP | R0805 3D | DNP | DNP | DNP | 2 |
| 38 | R15, R23 | R0805 0R 5% YAG/ASJ | R0805 3D | YAG/ASJ | N.A | R0805 0R 5% YAG/ASJ | 2 |
| 39 | R16 | R0805 220K 5% YAG/ASJ | R0805 3D | UNI OHM | N.A | R0805 220K 5% YAG/ASJ | 1 |
| 40 | R17 | R0805 5.6K 1% YAG/ASJ | R0805 3D | YAG/ASJ | N.A | R0805 5.6K 1% YAG/ASJ | 1 |
| 41 | R18 | R0805 150R 5% | R0805 3D | UNI OHM | 0805S8J0151T50 | R0805 150R 5% | 1 |
| 42 | R20 | R0805 560K 5% | R0805 3D | UNI OHM | 0805S8J0564T50 | R0805 560K 5% | 1 |
| 43 | R22 | R0805 470K 5% | R0805 3D | UNI OHM | 0805S8J0474T50 | R0805 470K 5% | 1 |
| 44 | R24 | R0805 4.99K 1% | R0805 3D | YAG/ASJ | 5100258 | R0805 4.99K 1% | 1 |
| 45 | R26 | R0805 43R 1% | R0805 3D | UNI OHM | 3501 | R0805 43R 1% | 1 |
| 46 | Rsens1, Rsens2 | R0805 100R 5% | R0805 3D | UNI OHM | 0805S8J0101T50 | R0805 100R 5% | 2 |
| 47 | U2 | ISL28208 SMD | SO8 | Renesas | ISL28208FBZ | internal supply | 1 |
| 48 | U3 | QFN40 ZIF socket | QFN40 ZIF socket | Renesas | 40LQ40S15050 | internal supply | 1 |

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