



Commercial Membrane User Interface Board

Samll Emerge Membrane User Interface Board Using NXP i.MX RT 144 pin processor

Changelog:
Schematic Q26047-001 REV A,
PCB Q25095-001:

Schematic Q26047-002 REV A,
PCB Q25095-002:

- HARDWARE REV BITS 0001.
- RECONFIGURE INPUTS AND OUTPUTS ON KEYPAD.
- R114 CHANGE FROM 1K TO 10K.
- MOVE SERIAL EEPROM TO ITS OWN BUS, I2C4.
- CHANGED 3.3V REG TO TPS74533 FOR BETTER ACCURACY.
- CHANGED C1,C2 FROM 47 TO 1500UF.
- ADD 1000pF CAPACITORS C166-C169 TO MEMBRANE KEYPAD INPUTS.

Schematic Q26047-002 REV B,
PCB Q25095-002:

- DEPOPULATE R74. POPULATE R70.

SCH Q26047-002 REV C :
PCB Q25095-003

- Replace membrane connectors with 1mm pitch 22 ckt ZIF connectors
- Add 237 ohm 0402 resistors to the membrane page
- Update REV bits to 0010
- Place a second CAN port and connector (remove R103 and R99)
- Add R146 and R147
- Change R39, R45, R49, R56, R60, R66, R67, and R68 to 1k 0402 resistors

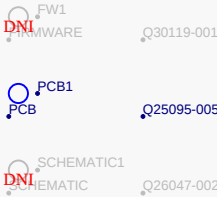
SCH Q26047-002 REV D :
PCB Q25095-004

- Add Assembly Test Points

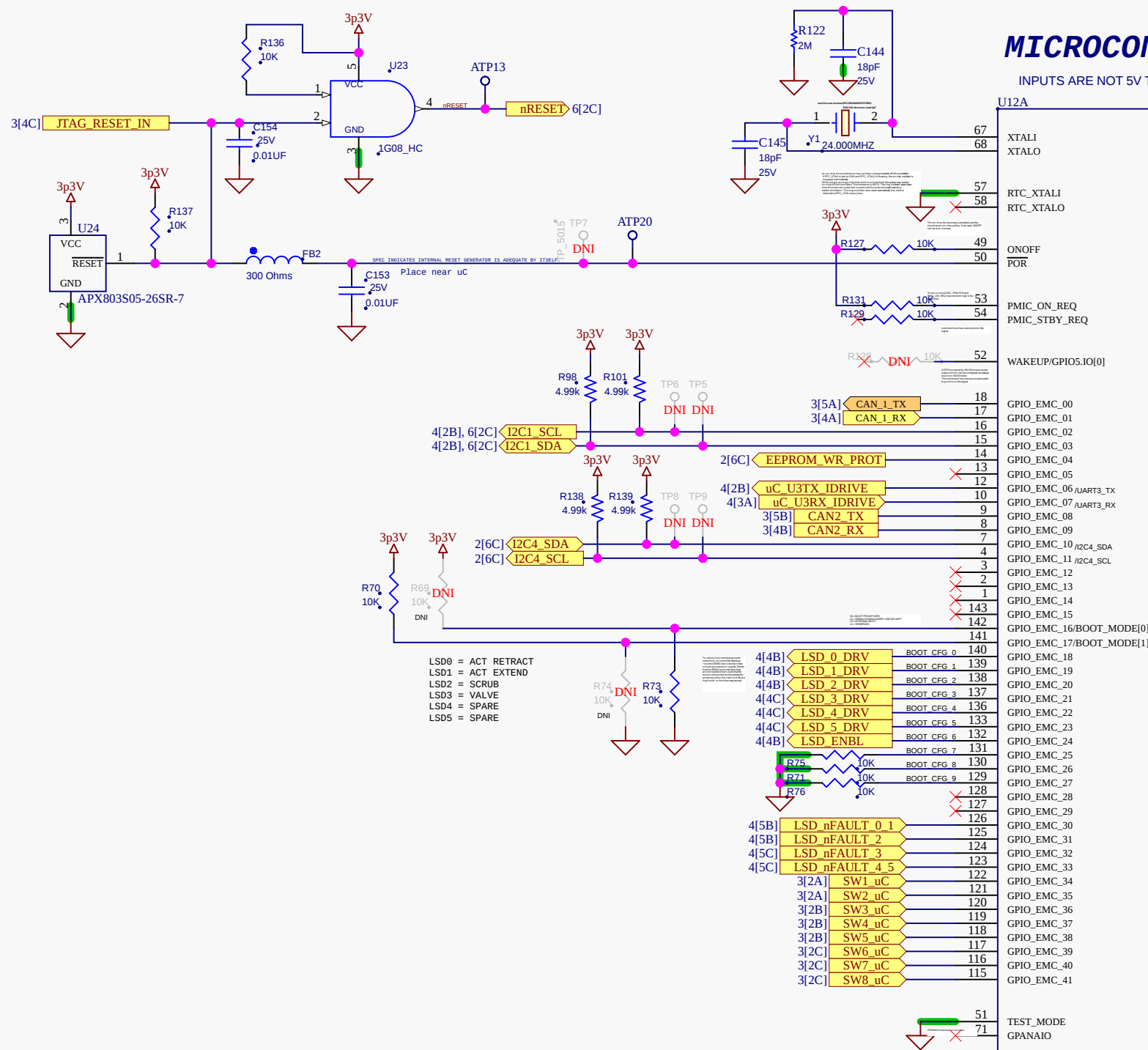
SCH Q26047-002 REV E:
PCB Q25095-005

- Update REV bits to 0011
- Change U24 with APX803S05-26SR-7
- Change C132 to 0.01uF 0402
- Change R120 to 10k
- Add U27 to page 2

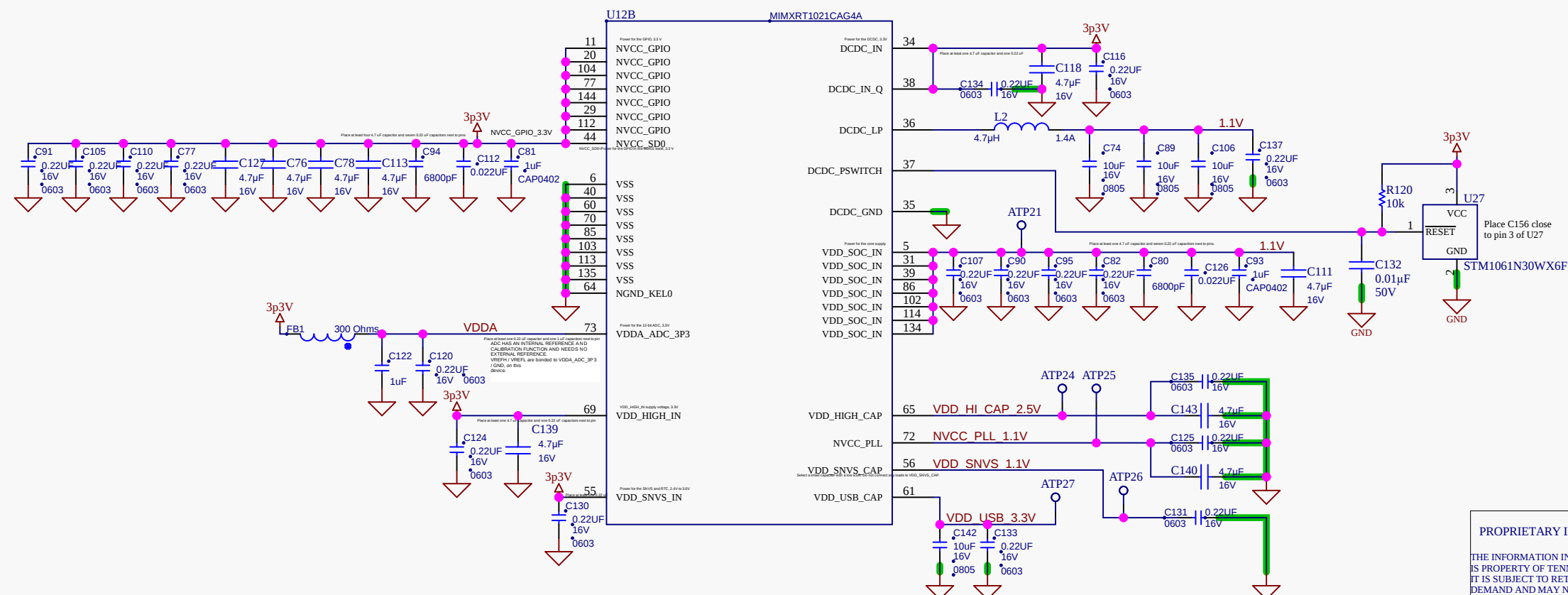
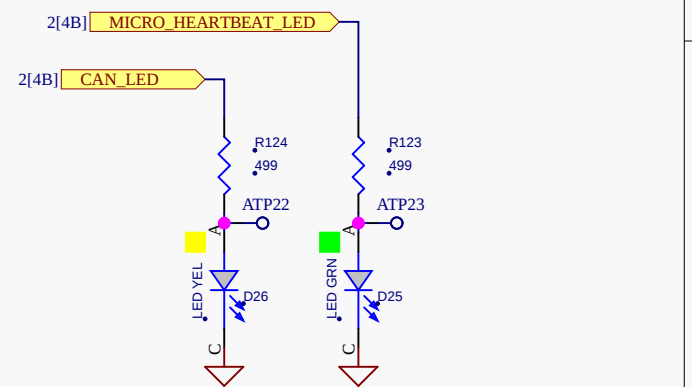
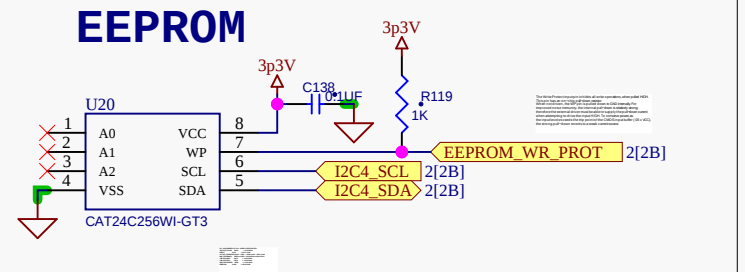
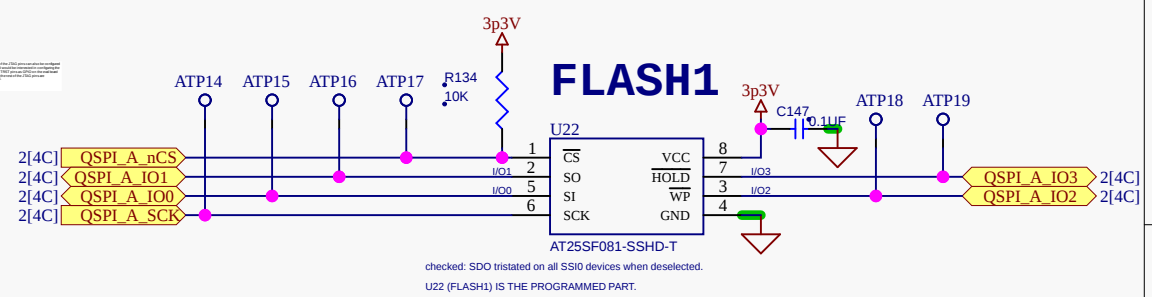
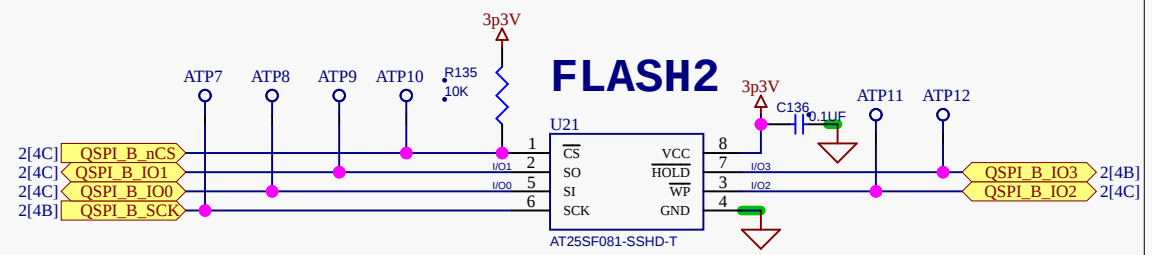
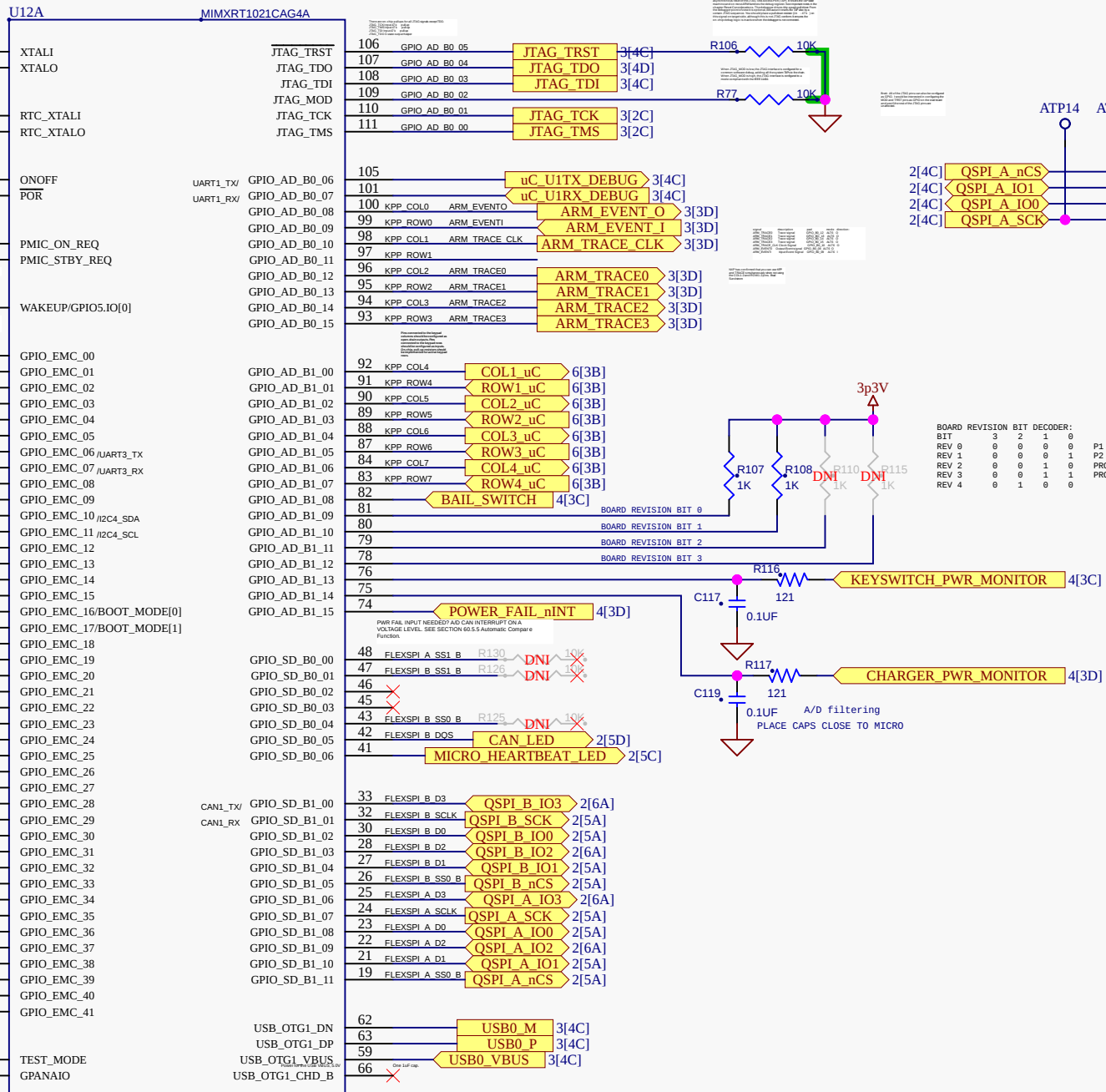
PART NUMBERS FOR REFERENCE ONLY:
PRINTED CIRCUIT ASSEMBLY 1248505



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		Document Number Q26047-002		Engineer B. Paulsen
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INPUTS ARE NOT 5V TOLERANT, EXCEPT USB_VBUS.



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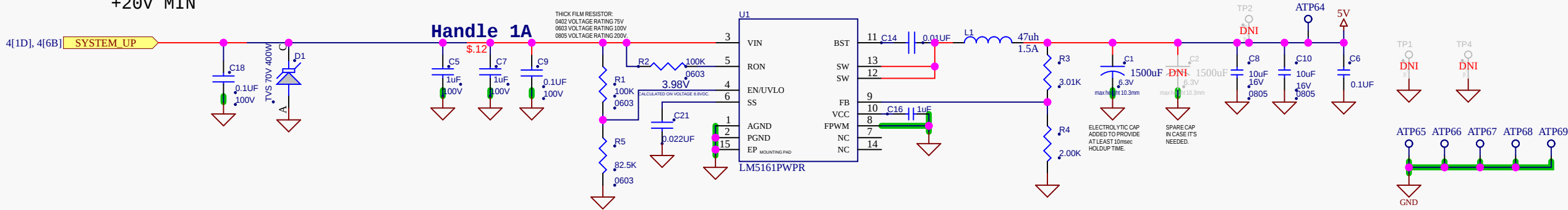
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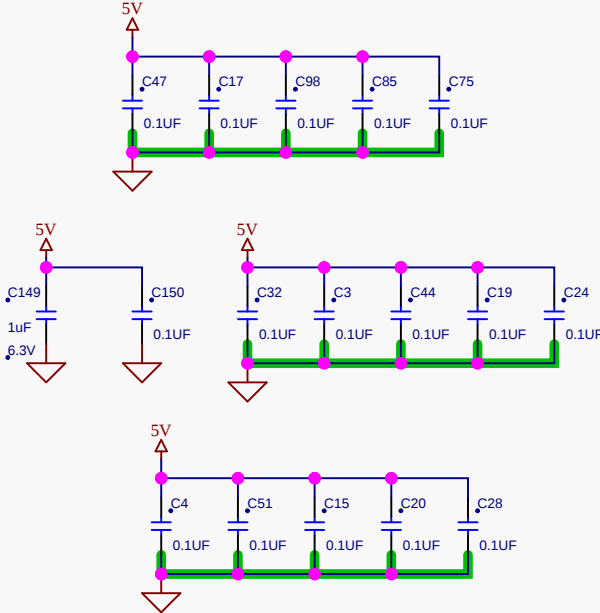
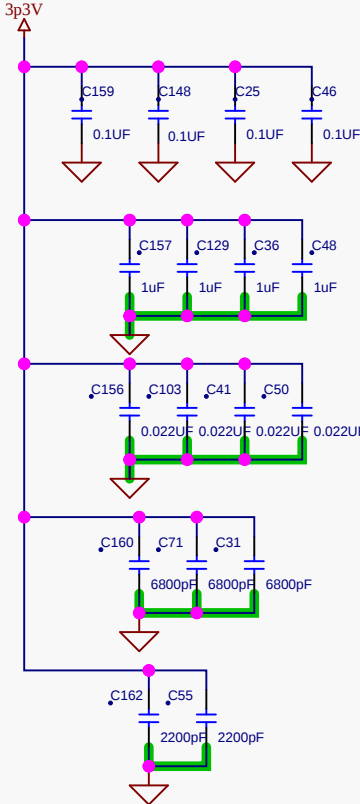
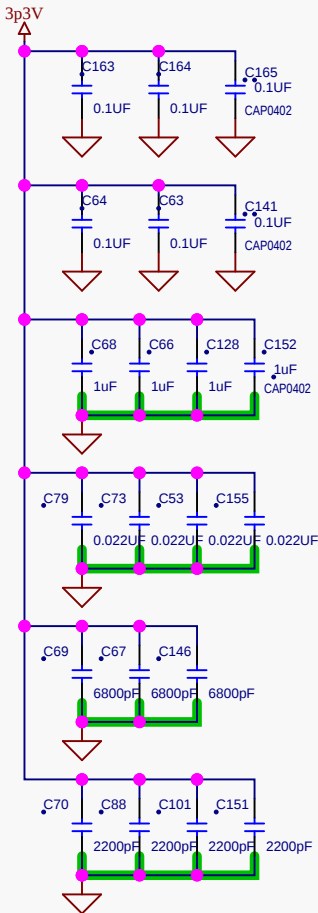
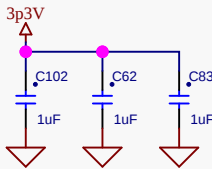
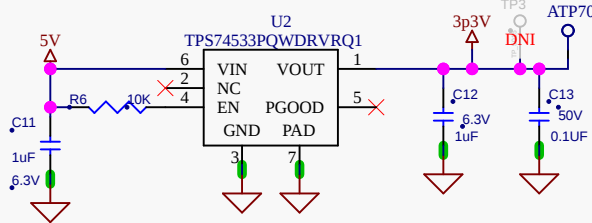
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POWER INPUT
52.2V MAX.
+36V/+24 NOMINAL
+20V MIN

POWER SUPPLY +5V, 100VIN, 1A



Power Supply 3.3V 0.5A



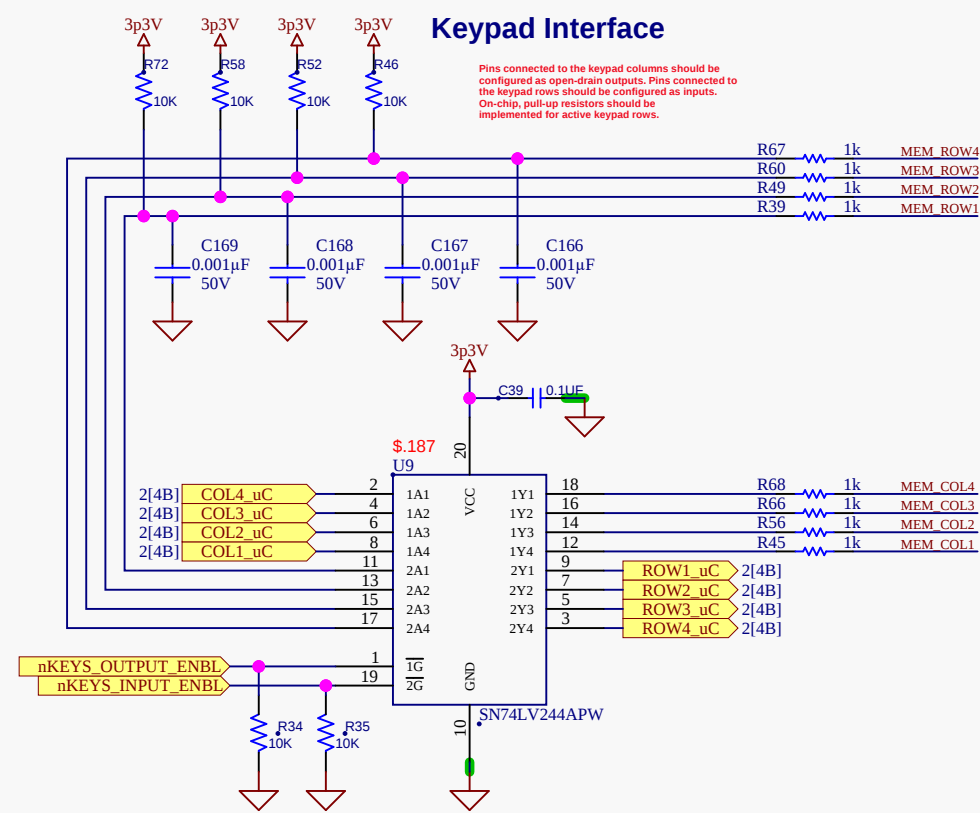
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Keypad & LED interfaces



MEMBRANE
BUTTONS

