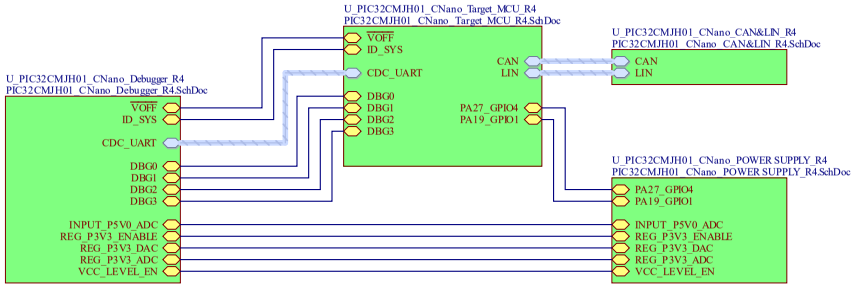
PIC32CM JH01 Curiosity Nano+ Touch



Power Supply

J3:
- Cut-strap used for full separation of target power from the level shifters and on-board regulators.
- For current measurements using the on-board power supply, this strap must be cut and an ammeter connected across.
- For current measurements using an external power supply, this strap could be cut for more accurate measurements. Leakage back through the switch is in the micro ampere range.

MIC5353:
Vin: 2.6V to 6V
Vout: 1.25V to 5.1V
Imax: 500mA
Drop out (typical): 50mV@150mA, 160mV @ 500mA
Accuracy: 2% initial
Thermal shutdown and current limit

Maximum output voltage is limited by the input voltage and the dropout voltage in the regulator.
(Vmax = Vin - drop out)

nEDBG_USB_P5V0 comes from DEBUGGER USB connector
VS power in out to the LIN transceiver comes from external regualted powr supply

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Debugger

Adjustable output and limitations:
- The debugger can adjust the output voltage of the regulator between 1.25V and 5.1V to the target.
- The level shifters have a minimal voltage level of 1.65V and will limit the minimum operating voltage allowed for the target to still allow communication.
- The output switch has a minimal volatege level of 1.70V and will limit the minimum voltage delivered to the target.
- Firmware configuration will limit the voltage range to be within the the target specification.
- Firmware feedback loop will adjust the output voltage accuracy to within 0.5%.

J19
Programming connector for factory programming of Debugger.

MIC5528:
Vin: 2.5V to 5.5V
Vout: Fixed 3.3V
Imax: 500mA
Dropout: 260mV @ 500mA

Target MCU

RX/TX on the header denotes the input/output direction of the signal respective to it's source.

CDC TX is output from the DEBUGGER.
CDC RX is input to the DEBUGGER.
TX is output from the TARGET device.
RX is input to the TARGET device.

LABEL1

Cannot open file C:\ALTIUM_WOR	[ASSY# / REV] SN: [SERIAL] [DATE yyyy.mm.dd]

PCBA LABEL 18X6mm

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