



[U9] IS OPTIONAL AND CAN BE NON-INSTALL. BESIDES OVERCURRENT PROTECTION IT ALSO PREVENTS RETURN CURRENT TO THE USB IF YOU FEED THE BOARD FROM AN INTERNAL SUPPLY. [J8] CAN BE CLOSED IF [U9] IS NON-INSTALL.

VSSYS CAN BE SUPPLIED THROUGH THE CONNECTOR, OR FROM USB. YOU CAN ATTACH A BATTERY CHARGER, BACKUP AT THIS NODE USING AN OR-ING CIRCUIT LIKE THE XC8110 TO PROVIDE UNINTERRUPTABLE SUPPLY.

THE DC/DC CAN HANDLE SYSTEM CURRENT UP TO 1 AMPERE. IN THAT CASE YOU NEED TO POWER THROUGH VSSYS, AS USB CANNOT DELIVER THAT CURRENT

THE I2C BUS IS NOT CONNECTED ON PURPOSE SO THE USER CAN WIRE THIS TO WHATEVER PINS HE SEES FIT. THE PINNING IS CHOSEN SO YOU CAN SHORT PIN 29 WITH PIN 30, AND PIN 28 WITH 31 TO USE I2C2 AND HAVE SIMPLE WIRING

[U6] OPTIONAL I2C EEPROM OR FRAM

[U7] AND ASSOCIATED PARTS ARE A CHEAPO RTC ON THE I2C BUS. EITHER INSTALL THIS ONE OR THE PRECISION RTC, NOT BOTH!

[J4] ENABLES THE HEARTBEAT LED ON GP25

[J5] SWITCHES GPIO47 TO THE CONNECTOR OR PSRAM CHIP SELECT

[U8] : PRECISION MEMS RTC.

[J6] CAN ASSIST DEBOUNCING THE RESET PIN AND PREVENT BROWN-OUT IF THE MAIN SUPPLY FAILS. IT WILL HOLD THE CPU IN RESET TILL THE 3V3 STABILIZES. [R9] MUST BE DEINSTALLED IF THIS FUNCTION IS USED.

[J7] CAN CONNECT THE INTERRUPT OUTPUT TO GPIO21

THE REFERENCE DIODE [U4] IS OPTIONAL TO PROVIDE A PRECISION REFERENCE FRO THE ADC. YOU CAN OPT NOT TO INSTALL, IN WHICH CASE THE REFERENCE IS 3V3