

ROACH 2 REV 2 UPDATES

- Most changes involve isolating the 3V3 and 3V3AUX devices to prevent backpowering.
- Splitting of I2C Bus between the 3V3 and 3V3AUX devices.
- 6.8mm Battery Holder replaced with a CR2032 (20mm) Battery holder.
- Crystal oscillator (for PPC) replaced with a clock oscillator.
- Additonal PPC LED and redesigned LED layout.
- Some ZDOK data lines have been swapped around.
- JTAG Isolation.
- Redesigned “POWER OVERRIDE” AND “AUTO START” circuits.
- Full list of changes can be found in the Roach 2 pre-production readiness Document.

Some of the changes are indicated in the diagram below :

Fault_LEDn latched to
ATX_PWR_OK to prevent
it operating during
standby

Splice ATX_PG into
SYS_PORn

QDR (U57,U58,U60,U61)
ODT range resistors
added and 10K pull-ups
on pins P6,A1 and A11

ZDOK pairs swapped
on FPGA

THS3061 replaced
with THS3091

PPC GPIO added for
PPC FAIL LED

DDR SPD Addresses
set to 110

Redesigned LED
Layout

FTDI_CTRL resistors

FTDI_TDI & FTDI_TRST buffered
through U82

U31 & U83 changed to
Switches (UART0)

New battery holder and
revised oscillator/RTC
circuit

Fault pull-ups (R68,69,70,71)
pulled up to 3V3 not
3V3AUX

JTAG Isolation. OEn
connected to ATX_PGn

Split I2C Bus between
3V3 and 3V3AUX devices

ATX Pin 13 to 3V3MON

New Circuitry for JP1 (Power
Override) and JP2 (Auto Start)

48Mhz Clock replaces
Oscillator

Redesigned LED Layout

