## **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.
- Additional 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

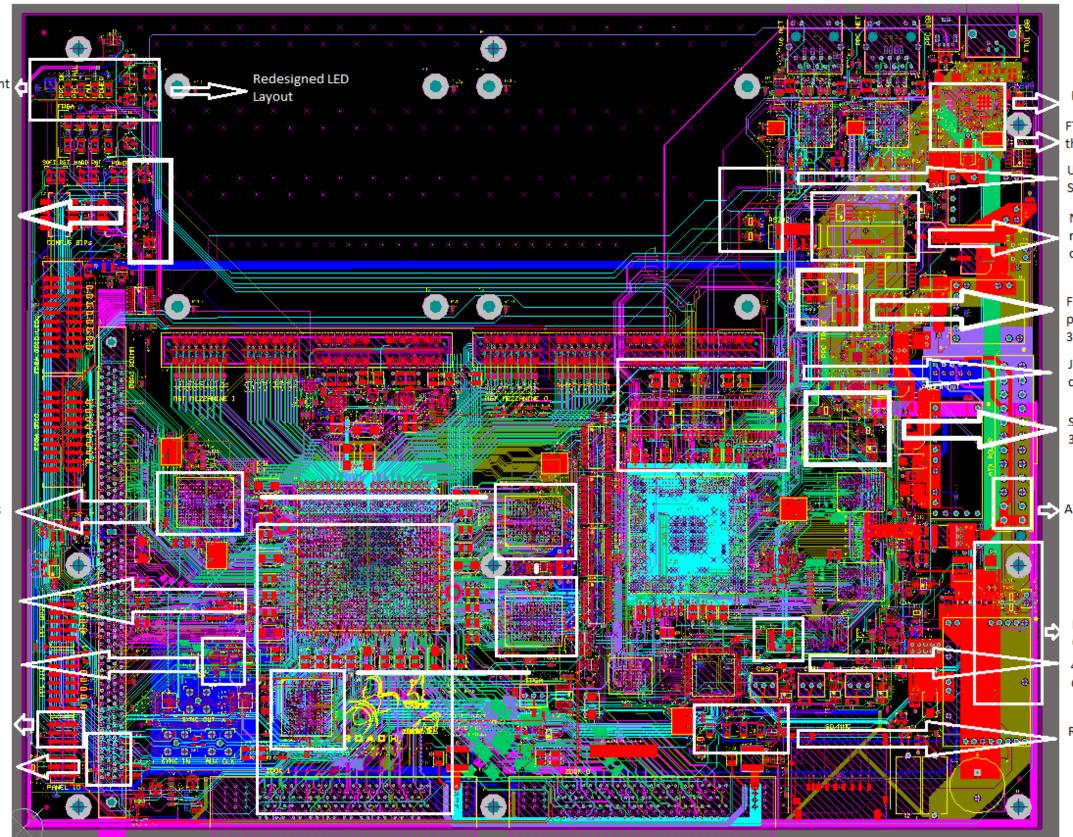
QDR (U57 U58,U60,U61) ODT range resistors added and 10K pull-ups on pins P6,A1 and A11

ZDOK pairs swapped on FPGA

THS3061 replaced with THS3091

PPC GPIO added for PPC FAIL LED DDR SPD Addresses

set to 110



FTDI\_CTRL resistors

FTDI\_TDI & FTDI\_TRST buffered through U82

U31 & U83 changed to Switches (UARTO)

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