CN1 — QBUS — PRIMARY SLOT, GRANT/INTERRUPT JUMPERS FROM EXPANSION UP

CN2 — QBUS

CN3 — QBUS

CN4 — QBUS — SECONDARY SLOTS, GRANT/INTERRUPT JUMPERS (IN-CARD BUS)

INT1 — INTUP / INT12 — JUMPER
GNT1 — GU1 / G12 — JUMPER

INT2 — INT12 / INT23 — JUMPER
GNT2 — G12 / G23 — JUMPER

INT3 — INT23 / INT34 — JUMPER
GNT3 — G23 / G34 — JUMPER

INT4 — INT34 / INTDOWN — JUMPER
GNT4 — G34 / G4D — JUMPER

EXPANSION UP, FROM ANOTHER CARD WITH HIGHER PRIORITY — J1, J4 — 10056845-140LF

EXPANSION DOWN, TO ANOTHER CARD WITH LOWER PRIORITY — J3, J5 — 10056845-140LF

POWER — ATX 39-29-9205 — D2 DIODE-SC — R6 0R — BPOK — PG — PS_ON — 1586627-1 — J6 — D1 DIODE-SC — 12B / 5B — CONN-H2

CONTROL SIGNALS — R7 0R — BDCOK — R8 470R — J7 CONN-DIL10 — BEVNT / BPOK / SRUN / BDCOK / BHALT — ON — PS_ON — CONN-H2

TERMPWR — JUMPER — TERMINATION
R1, R2, R3, R4, R5 — 4610X-104-181/391L
GRANT TERM — INTDOWN / G4D — CONN-SIL8

Jumpers are provided for bus grant continuity – however, using the pair on the first slot only makes sense if you have another backplane connected above the one with the jumper placed, and you wish to disable this backplane

J6 is to be soldered on the back - it presents a DEC-standard front panel connection

BPOK and BDCOK are fed from the ATX power supply's 5V_STBY and POK/PG pins – there are shorted resistor footprints for any needed mods - also available on J6

BEVNT needs to be pulled high to disable the line clock, a 0603 resistor footprint is provided for this. Else, feed line clock signal into BEVNT.

D2 is not needed if not using the ATX power supply.

D1 prevents the ATX power supply from attempting to charge the backup battery on 5B

The backplane is fully wired as a Q22 backplane, with all minimum necessary signals provided. Spare lines are left open, some bussed. No additional pads are provided due to lack of space

An effort was made to make it as clean and cheap as possible. Any needed mods are easily made with x-acto, solder and wire

This backplane's expansion headers were designed with 90° connectors in mind. Remove the center pin on the outer row of each header to make keying work. If using ribbon cable, make sure you swap even/odd rows at one of the IDC connectors, or solder the "down" headers (J3/J4) to the bottomside of the board.

Clunky provisions for termination are provided onboard. If you're building this, you should be able to do your own research on how to properly configure this for your system.

Any issues, comments or suggestions? Get in touch via the project's repository at github.com/GeorgeRudolf/Q22Mini