

F16 Pit PHCC Breakout boards

Connector types on the Breakout boards :

there are 3 types of connectors on the boards :

- **14 pin** connectors that connect the board to the 64Key boards.
- **10 pin** connectors that connect the panels with low count of switches.
- **20 pin** connectors that connect the panels with high count of switches.

Connecting the breakout boards to the 64Key daughter boards :

The 14 pin connectors connect 1 or 2 64Key boards to the breakout boards -
the right console breakout board handles the entire console, thus connects to 2 64Key boards.
All the rest connect to one 64Key board.

Connecting the breakout boards to the panels:

two types of connectors are used to connect the boards to the panels, and they use a consistent wiring scheme:

10 pin connectors:

the common wire is connected to either pin 1 or pin 10 (best practice is just to connect common to both and not worry to which is the active one).

the switches are connected to pin 2-9.

for connectors that do not use all the 8 ports – the count always start on pin 2.

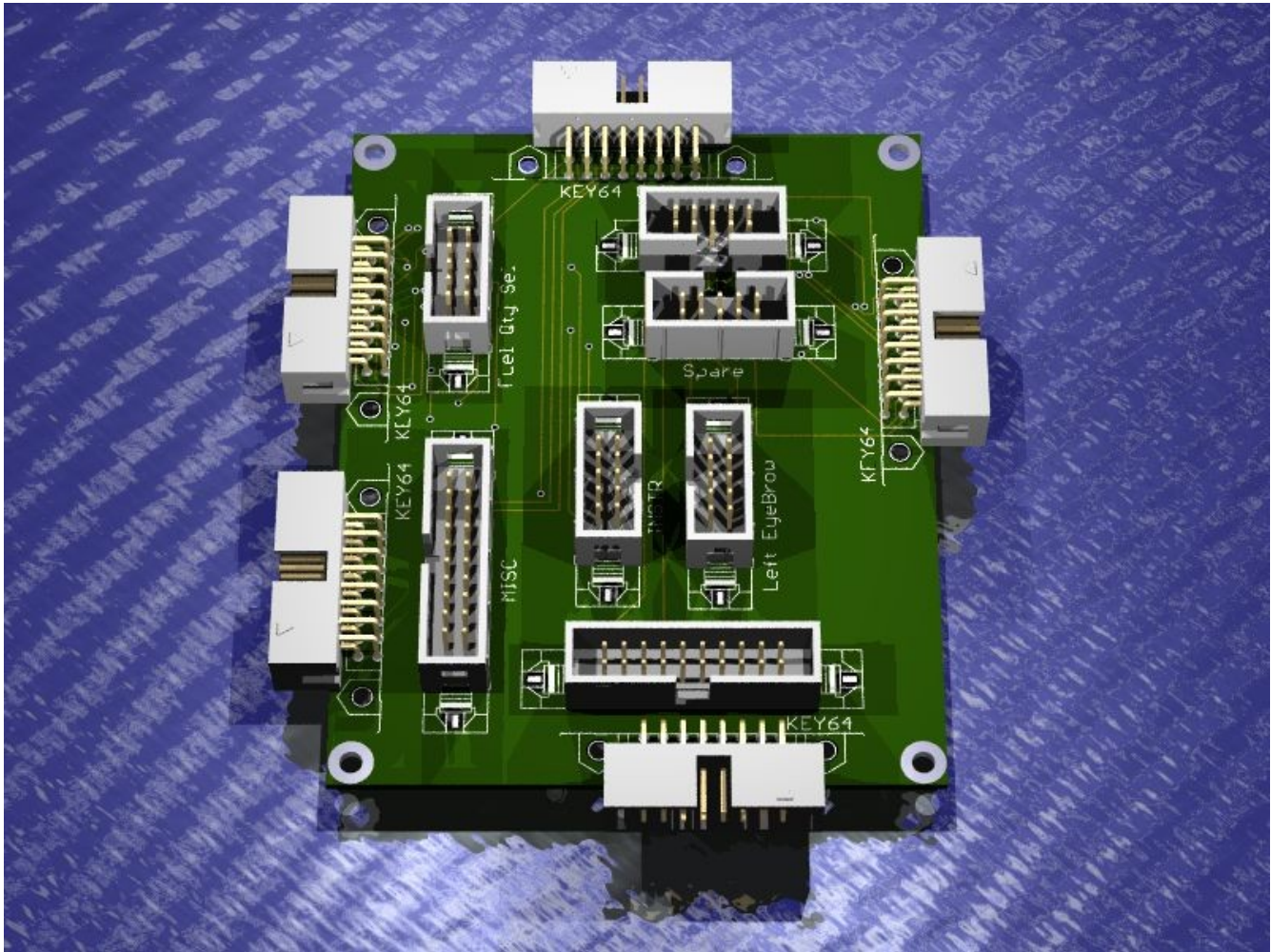
20 pin connectors:

the 20 pin connectors are wired differently, pin 1 and 2 are common, pins 3 and 4 are unused,

pin 1 is common to the uneven pins – 5,7,9,11,13,15,17,19

pin 2 is common to the even pins – 6,8,10,12,14,16,18,20

Center Console breakout board pin out:



14pin connectors:

- Top connector is common connected to CON2 on the KEY64D_PH board.
- Other 4 connectors are connecting to CON3,4,5,6 on the KEY64D_PH board.

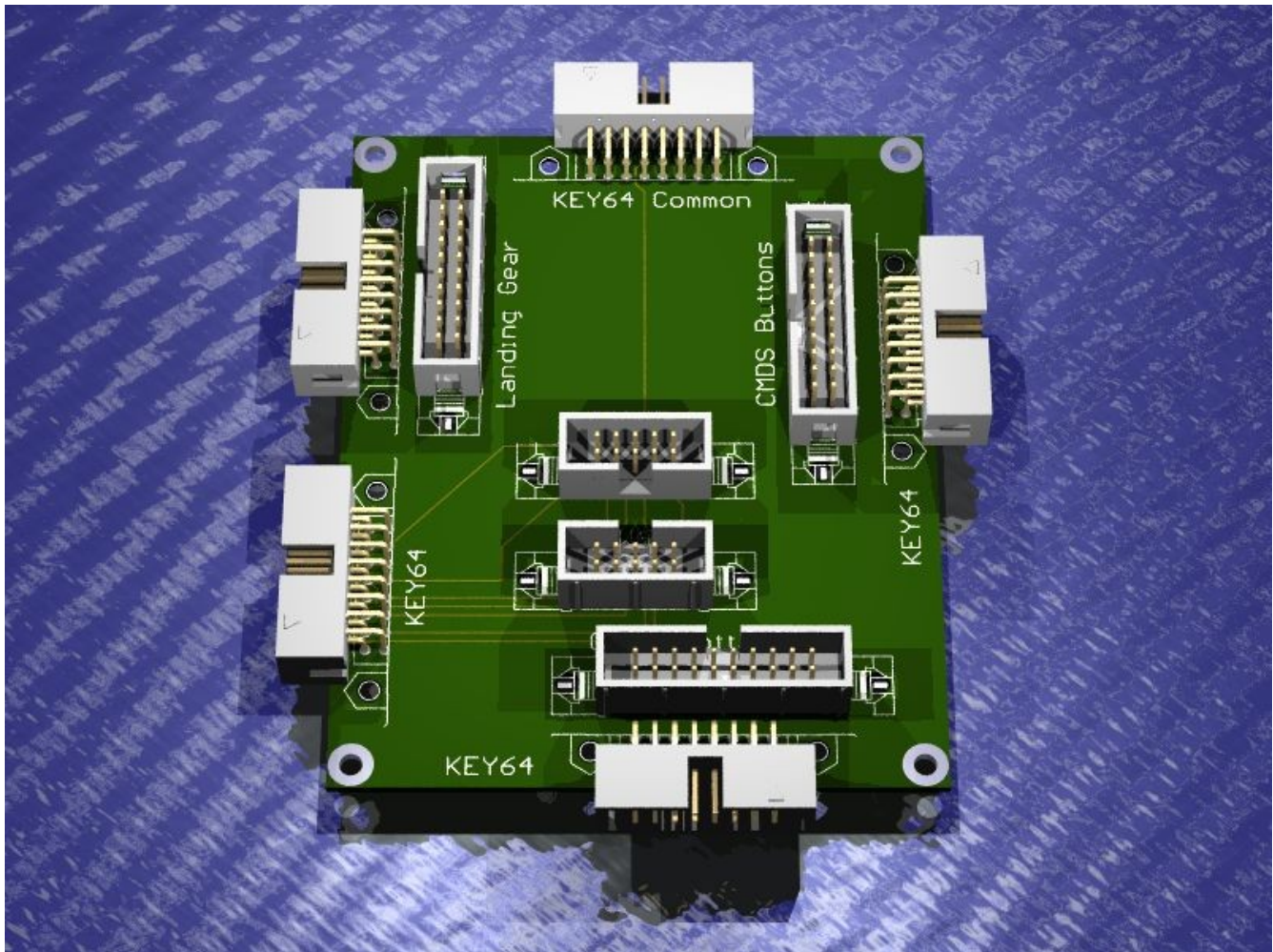
20 pin connectors:

- Left connector – Misc
- Bottom connector – Spare

10 pin connectors :

- Top Left – Fuel qty sel – all 8 pins available
- Top right - TWP – pins 2,3,4,5,6,7 available
- Second from top right - Spare - all 8 pins available
- Bottom left - Instr - pins 2,3,4,5 available
- Bottom right – Left eyebrow - pins 2,3,4,5 available

Left Aux Console breakout board pin out:



14pin connectors:

- Top connector is common connected to CON2 on the KEY64D_PH board.
- Other 4 connectors are connecting to CON3,4,5,6 on the KEY64D_PH board.

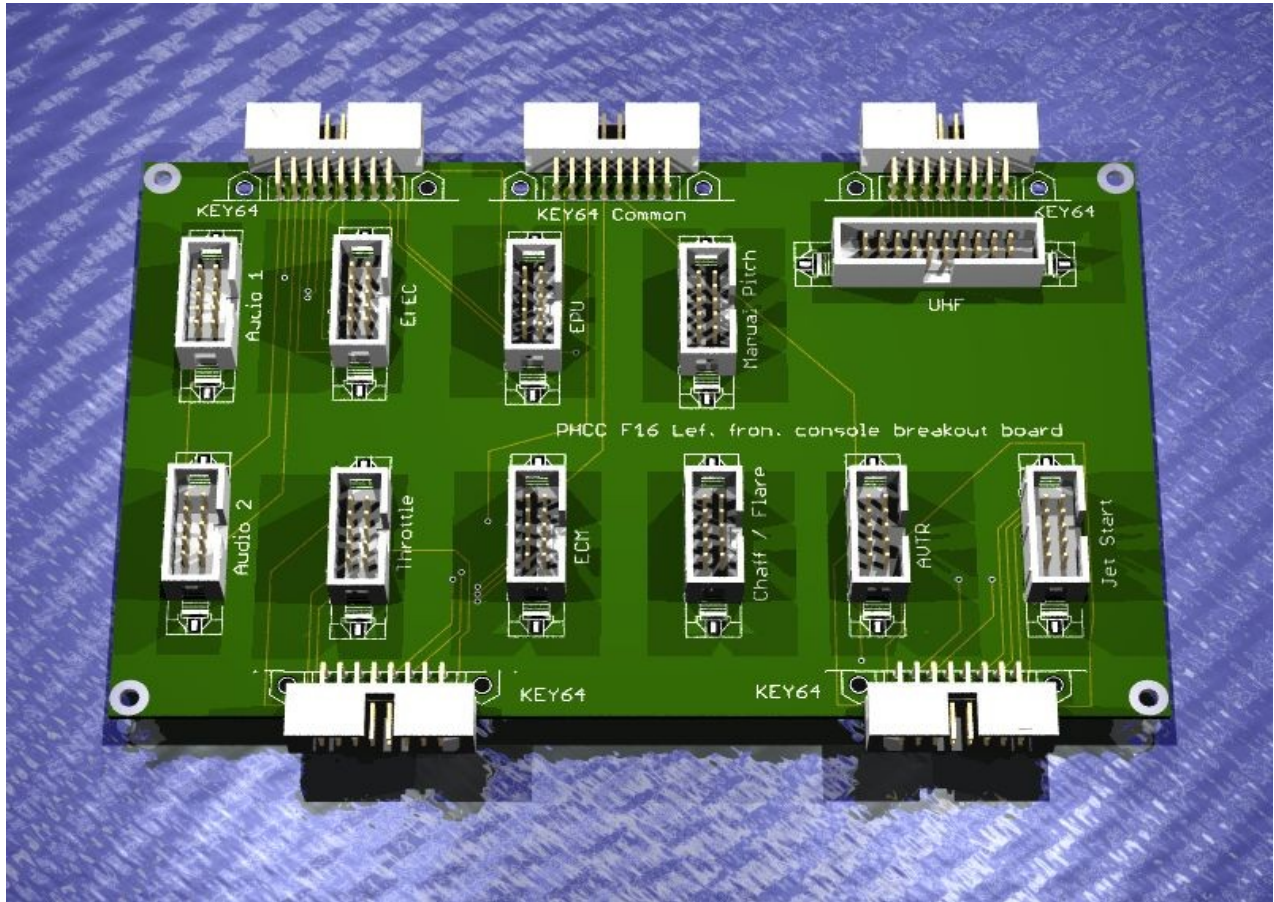
20 pin connectors:

- Left connector – Landing Gear
- Bottom connector – CMDS Rotaries
- Right connector – CMDS Buttons

10 pin connectors :

- Top – HMD – all 8 pins available
- Bottom – TWA - all 8 pins available

Left Front Console breakout board pin out:



14pin connectors:

- Center top connector is common connected to CON2 on the KEY64D_PH board.
- Other 4 connectors are connecting to CON3,4,5,6 on the KEY64D_PH board.
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20 pin connector:

- UHF

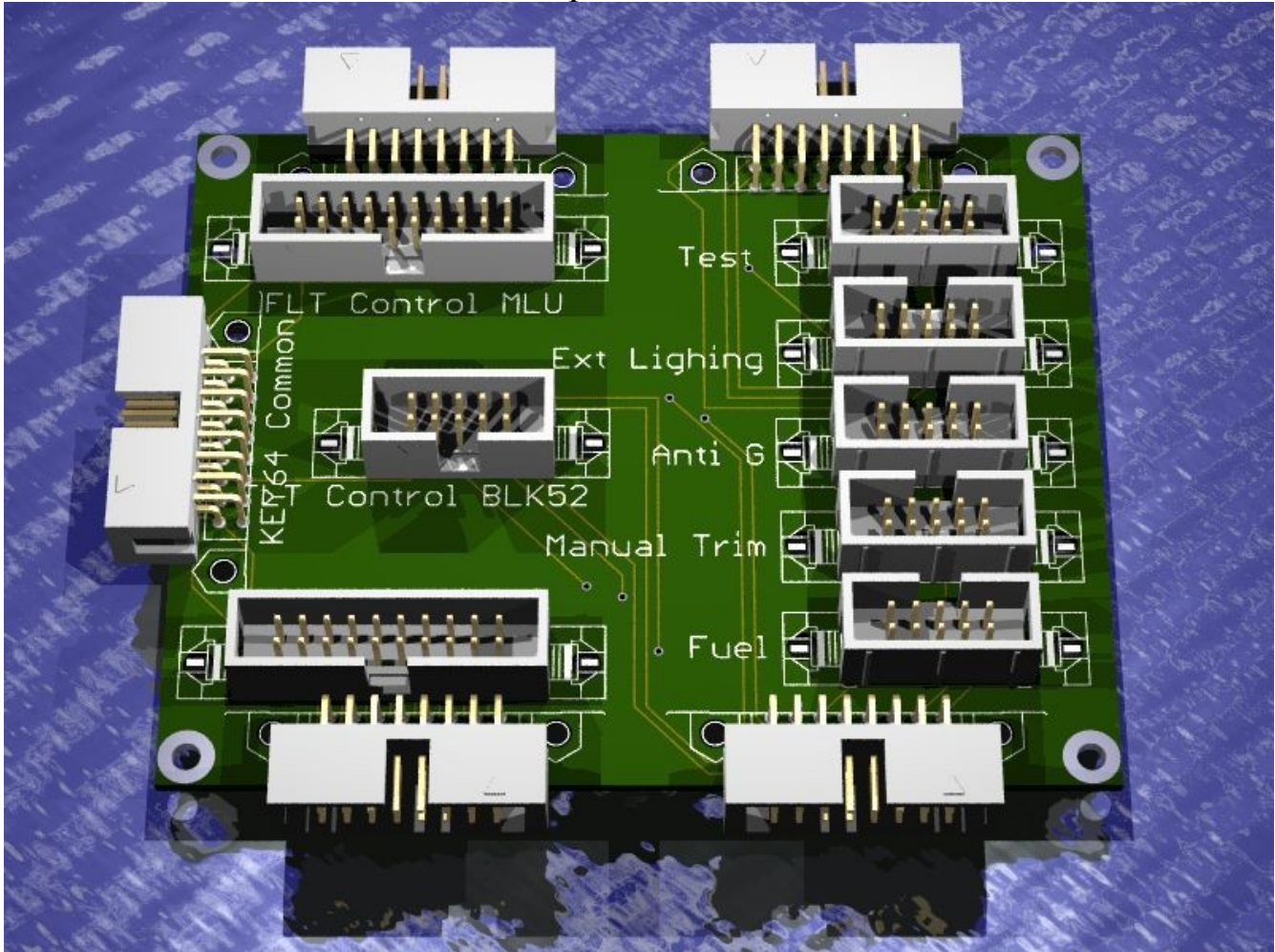
Top 10 pin connectors (left to right):

- Audio 1 – pins 2,3,4,5,6,7 available
- Elec - pins 2,3,4 available
- EPU - pins 2,3,4,5 available
- Manual Pitch - pin 2 available

Bottom 10 pin connectors (left to right):

- Audio 2 – pins 2,3 available
- Throttle - all 8 pins available
- ECM - all 8 pins available
- Chaff / Flare - pin 2 available
- AVTR - pins 2,3,4,5,6,7,8 available
- Jet Start - all 8 pins available

Left Rear Console breakout board pin out:



14pin connectors:

- Left connector is common connected to CON2 on the KEY64D_PH board.
- Other 4 connectors are connecting to CON3,4,5,6 on the KEY64D_PH board.
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20 pin connector:

- Top – FLT Control MLU / Spare
- Bottom – Aux Comm

Left 10 pin connector:

- FLT Control BLK52 / Spare - all 8 pins available

right 10 pin connectors (top to bottom):

- Test - all 8 pins available
- Ext Lighting - all 8 pins available
- Anti G - pin 2 available
- Manual Trim - pin 2 available
- Fuel - pins 2,3,4,5,6,7 available