Open Hardware DSP Platform — www.ohdsp.org
CoreOne — xCORE200 Platform
Revision 2.0
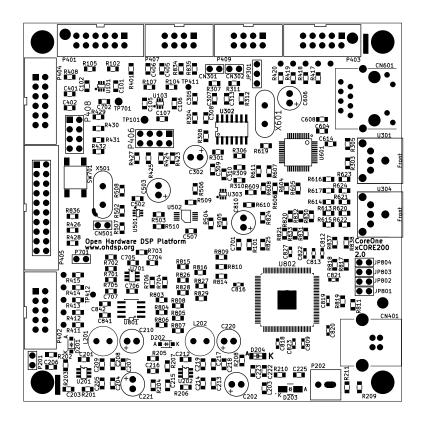

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CoreOne
xCORE200
2.0

Notes:

4 layer stackup:
1oz copper
0.2mm FR4
0.5oz copper
1mm to 1.2mm FR4
0.5oz copper
0.2mm FR4
1oz copper

eg Dirty PCB or JLCPCB JLC7628 Stackups

Use 26AWG ribbon cables to match PCB impedances (approx 89ohm)

Approx impedances

Ethernet impedance 100ohm diff/50 ohm SE:
0.3mm trace with 0.5mm clearance between traces

USB impedance 90ohm diff/45 ohm SE:
0.3mm trace with 0.3mm clearance between traces

50ohm traces with ground plane:
Trace 0.35mm, Clearance 0.2mm

75ohm traces with ground plane:
Trace 0.2mm, Clearance 0.3mm

89ohm traces with ground plane:
Trace 0.135mm Clearance 0.5mm to 1mm (to other traces)

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Size: A4	Date: 2019—04—02		Rev: 2.0
KiCad E.D.A. kicad (5.1.0)—1			Id: 1/1