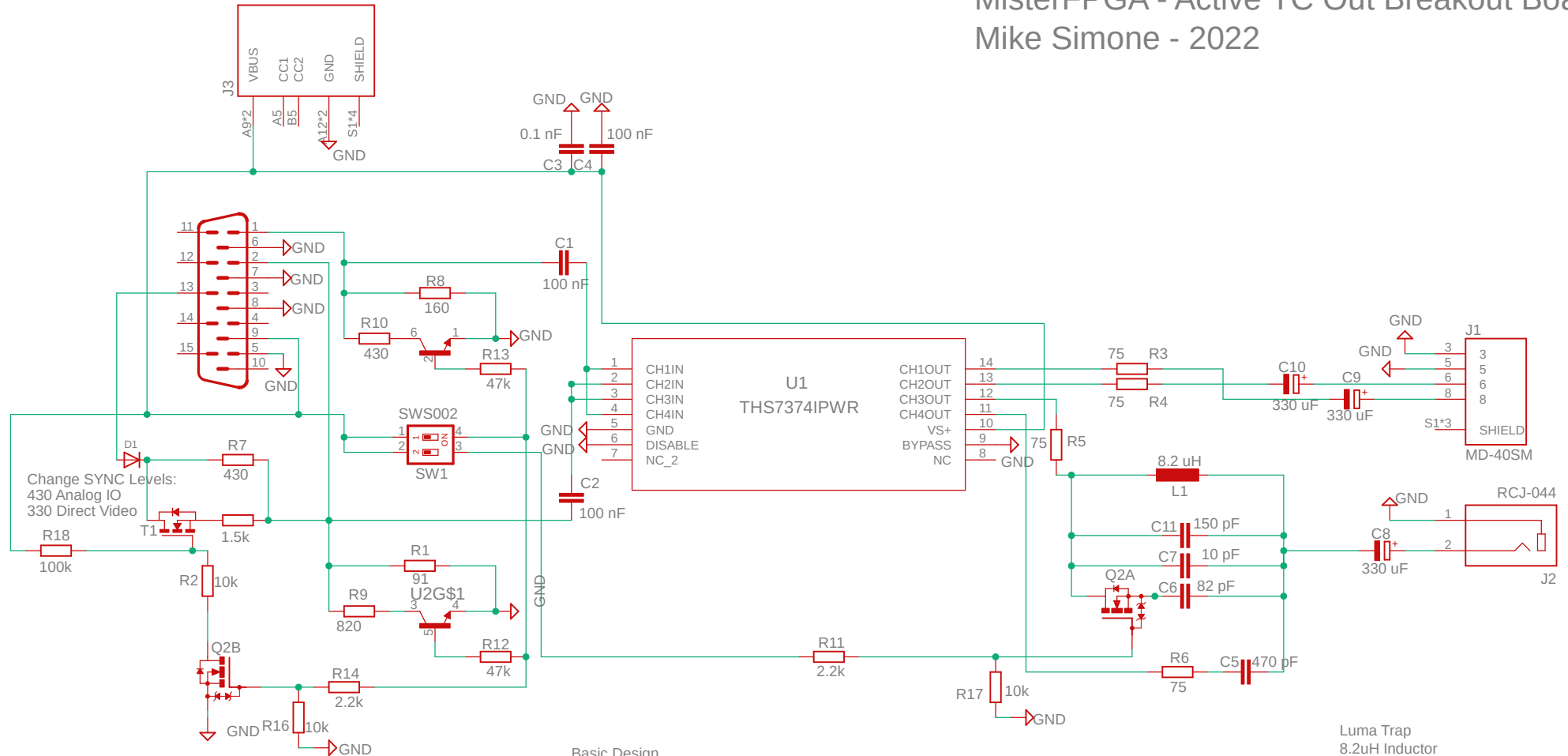


MisterFPGA - Active YC Out Breakout Board

Mike Simone - 2022



Switch between Analog IO / Direct Video
Voltage Divider to Match NTSC Spec
Analog IO Board (ON)
Direct Video (OFF)

Switch also enables a MOSFET to change the sync level for DV.

Basic Design

MisterFPGA Analog IO VGA (R-CHROMA) -> 116 Ohms -> THS7374 -> 75 Ohms -> (470 pF Cap Composite)
MisterFPGA Analog IO VGA (G-LUMA) -> 82 Ohms -> THS7374 -> 75 Ohms -> (Luma Trap Composite)

MisterFPGA Direct Video VGA (R-CHROMA) -> 160 Ohms -> THS7374 -> 75 Ohms -> (470 pF Cap Composite)
MisterFPGA Direct Video VGA (G-LUMA) -> 91 Ohms -> THS7374 -> 75 Ohms -> (Luma Trap Composite)

Luma Trap
8.2uH Inductor
160 pF Capacitor (PAL)
82 pF (242 pF) Capacitor (NTSC)
MOSFET to Switch Between NTSC/PAL

All Capacitors / Resistors use a 1% Tolerance, Inductor 5%

