CURRENT CONTROL IS ANALOGIC FOR PREVENT MICROCONTROLLER PROGRAM FAIL
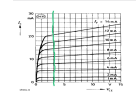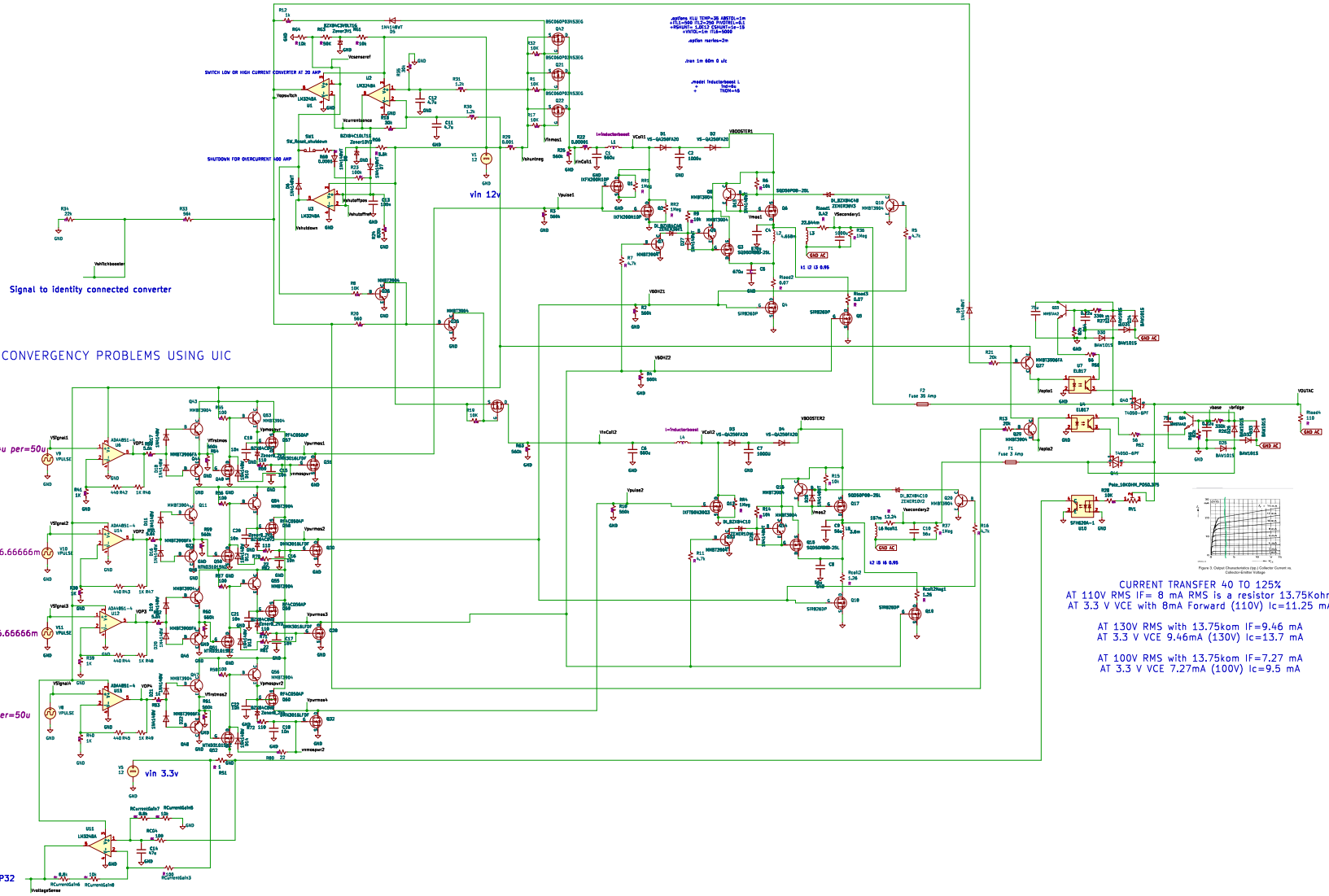
SWITCH LOW OR HIGH CURRENT CONVERTER AT 20 AMP

SHUTDOWN FOR OVERCURRENT 100 AMP

vIn 12v

Signal to identity connected converter

SMALL RESISTORS ARE TO SOLVE CONVERGENCY PROBLEMS USING UIC

y1=0 y2=3.3 td=0 tr=1u tf=1u tw=44u per=50u

ESP 32 SIGNALS TO BE OPIMIZED
FOR MOSFET AND CAPACITORS.

y1=0 y2=3.3 td=0.333333m tr=1u tf=1u tw=8m per=16.66666m

y1=0 y2=3.3 td=8.666666m tr=1u tf=1u tw=8m per=16.66666m

y1=0 y2=3.3 td=0 tr=1u tf=1u tw=27u per=50u

vin 3.3v

Voltage controls to ESP32

Shunt 1 ohm Gain 188/1

Ic=9.5 mA  VD=9.5mV Opout= 1.79 Volts
Ic=11.25 mA VD=11.25mV Opout= 2.35 Volts
Ic=13.7 mA  VD=13.7mV Opout=2.57 Volts

CURRENT TRANSFER 40 TO 125%
AT 110V RMS IF= 8 mA RMS is a resistor 13.75Kohm
AT 3.3 V VCE with 8mA Forward (110V) Ic=11.25 mA

AT 130V RMS with 13.75kom IF=9.46 mA
AT 3.3 V VCE 9.46mA (130V) Ic=13.7 mA

AT 100V RMS with 13.75kom IF=7.27 mA
AT 3.3 V VCE 7.27mA (100V) Ic=9.5 mA

VOUTAC