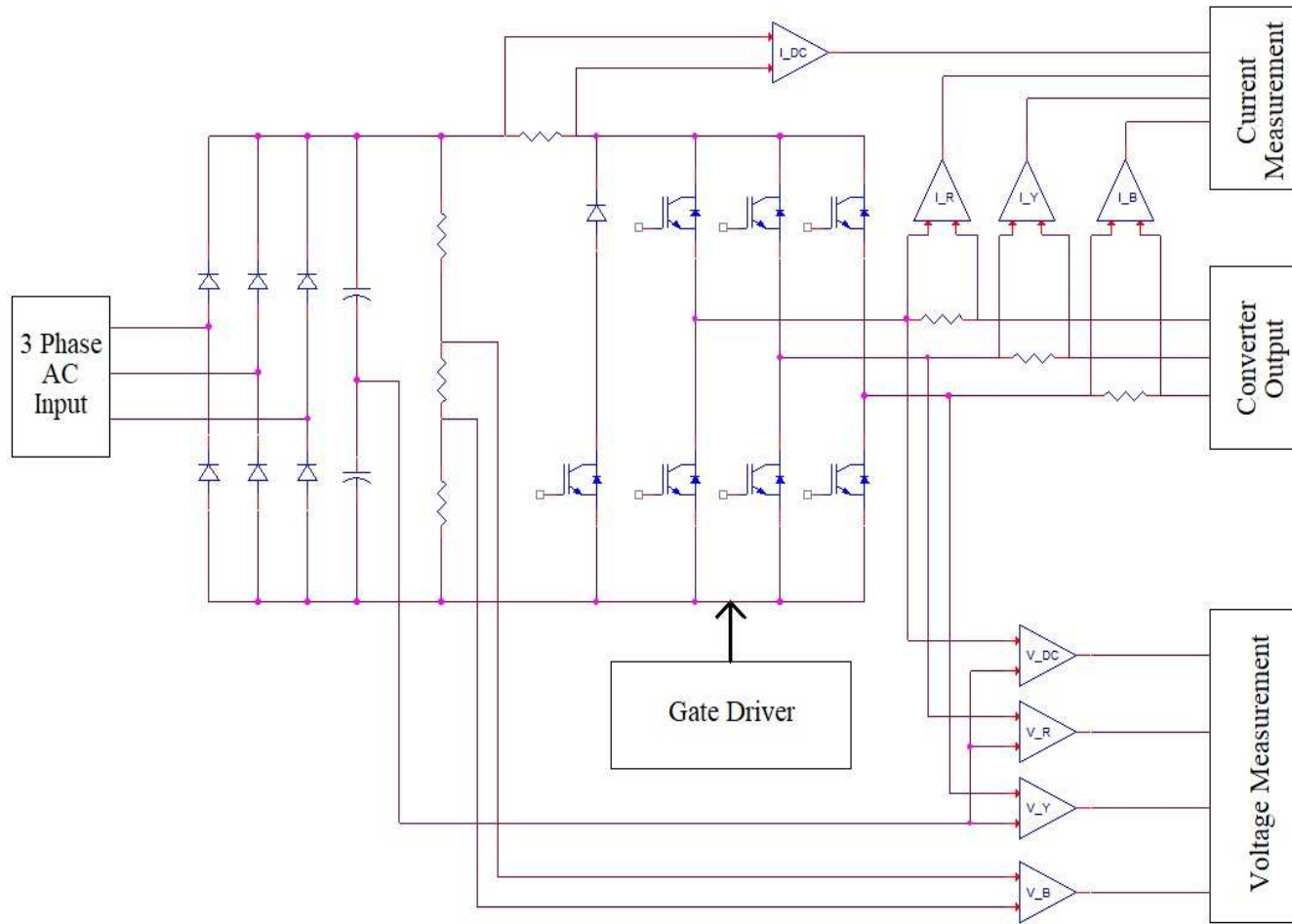


3 LEG 2 LEVEL CONVERTER

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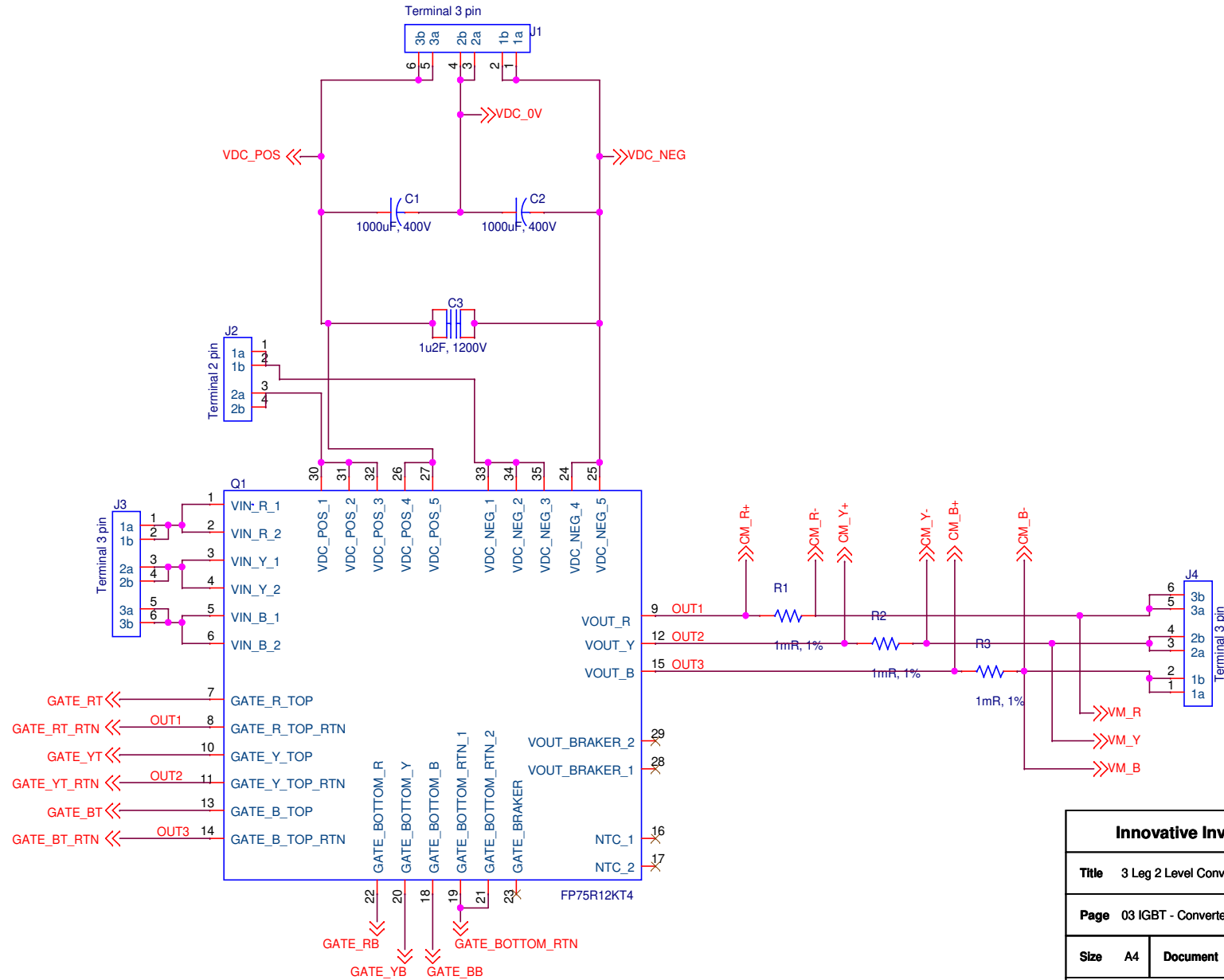
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Page		01 Cover page	Variant Name <Core Design>
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Block diagram



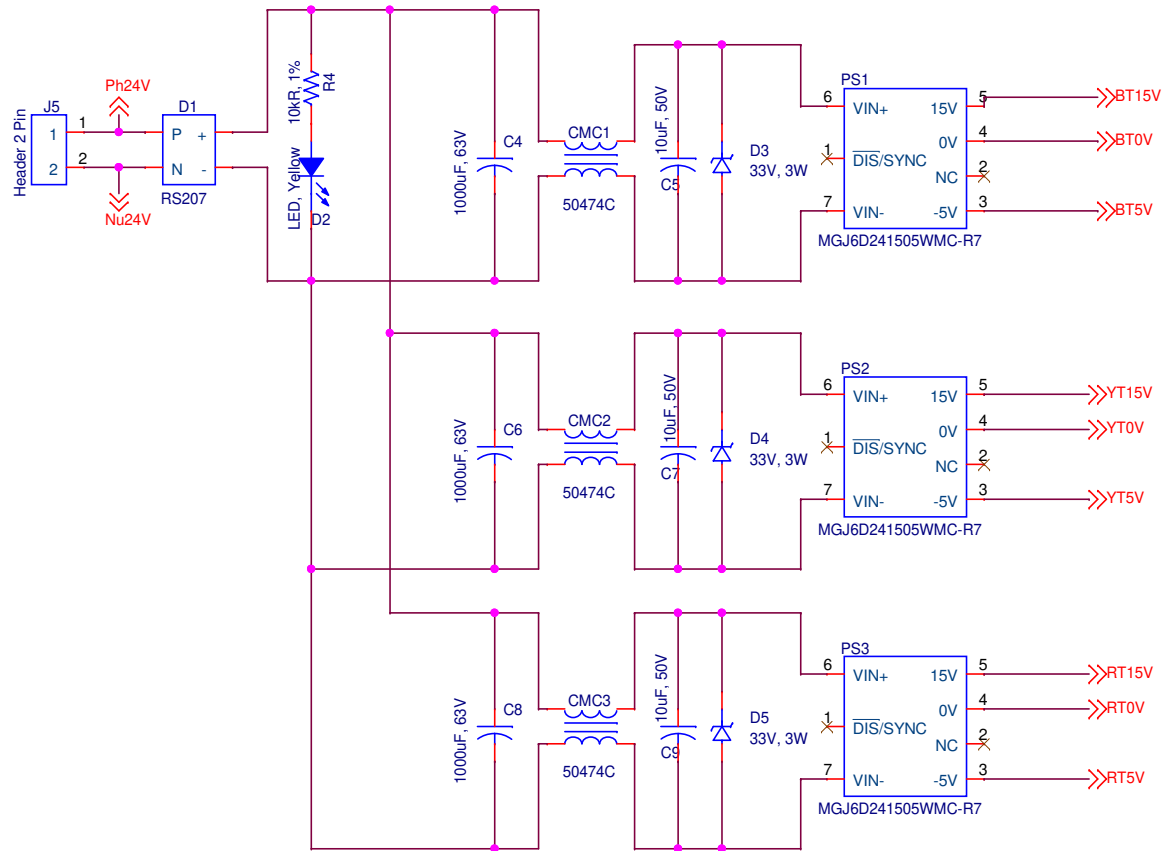
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Converter



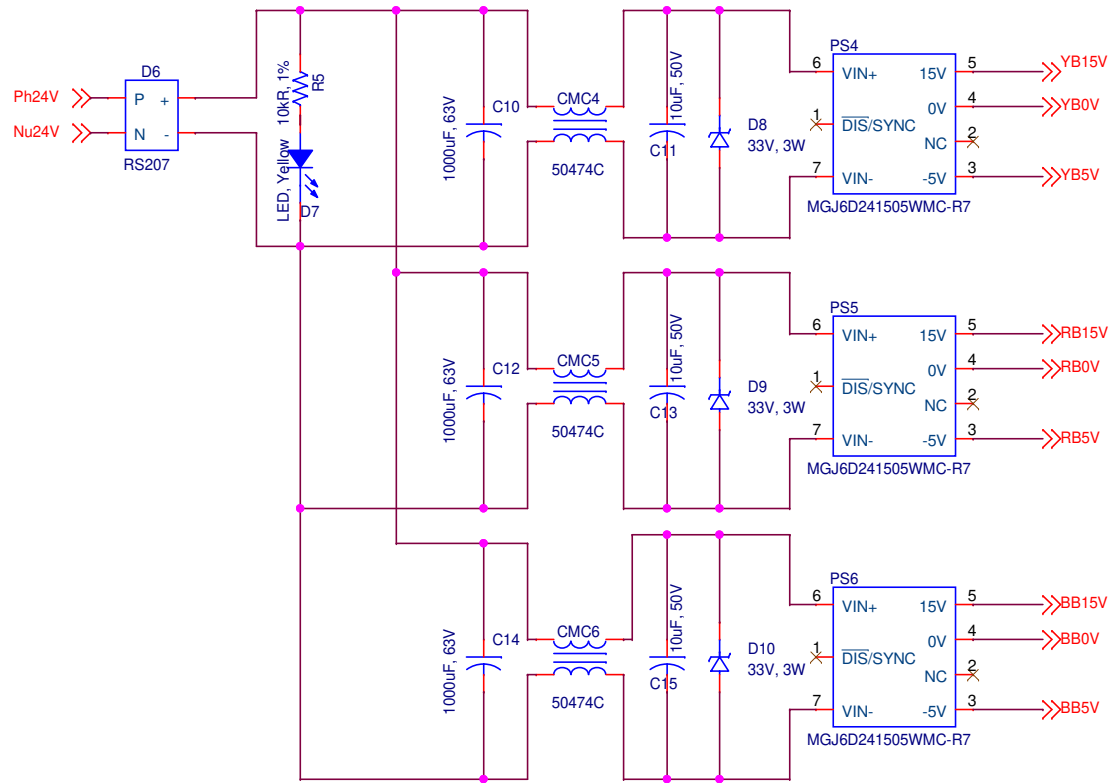
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Top Switch Power Supplies



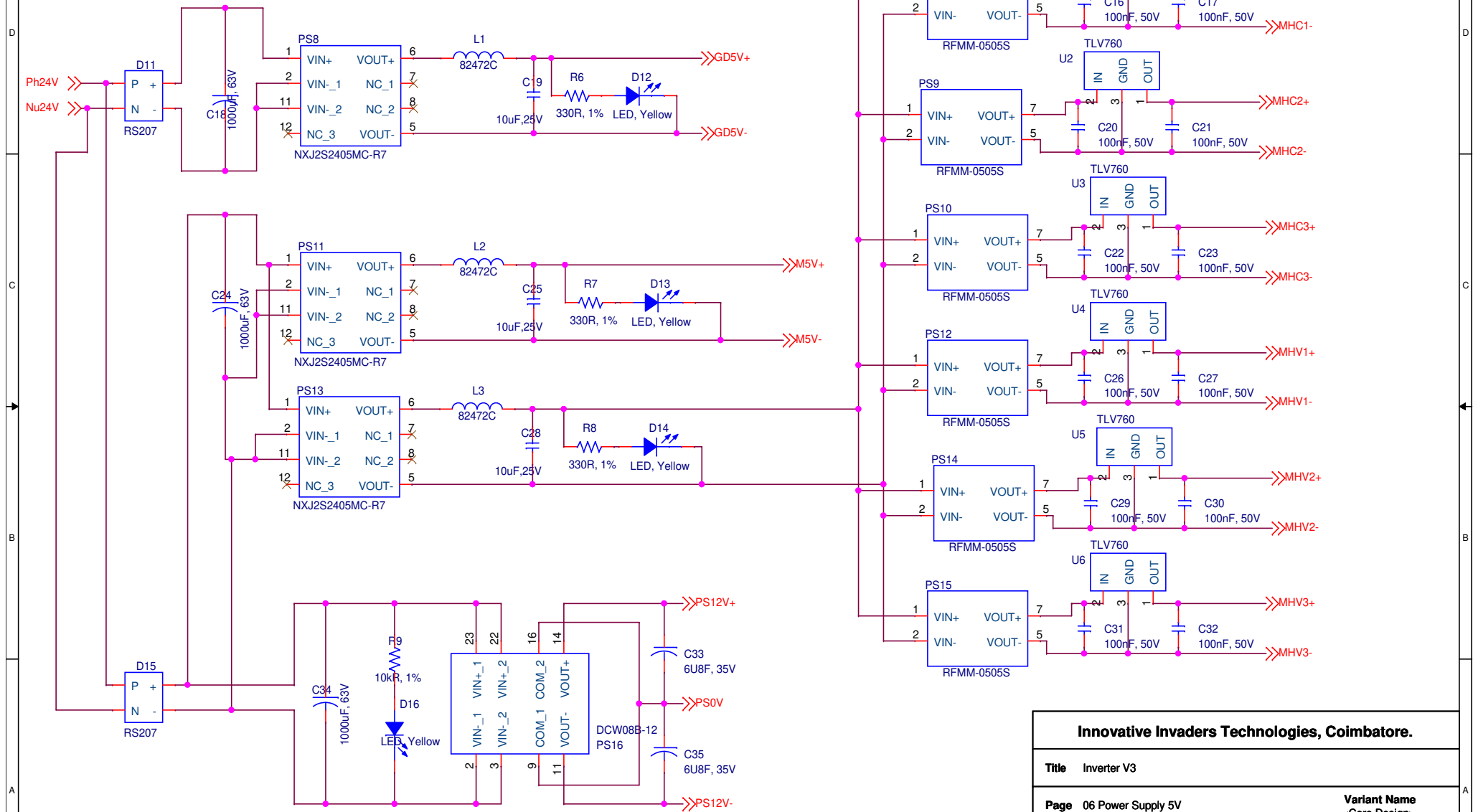
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Bottom Switch Power Supplies



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Page	05 Bottom Switch Power Supplies		Variant Name <Core Design>
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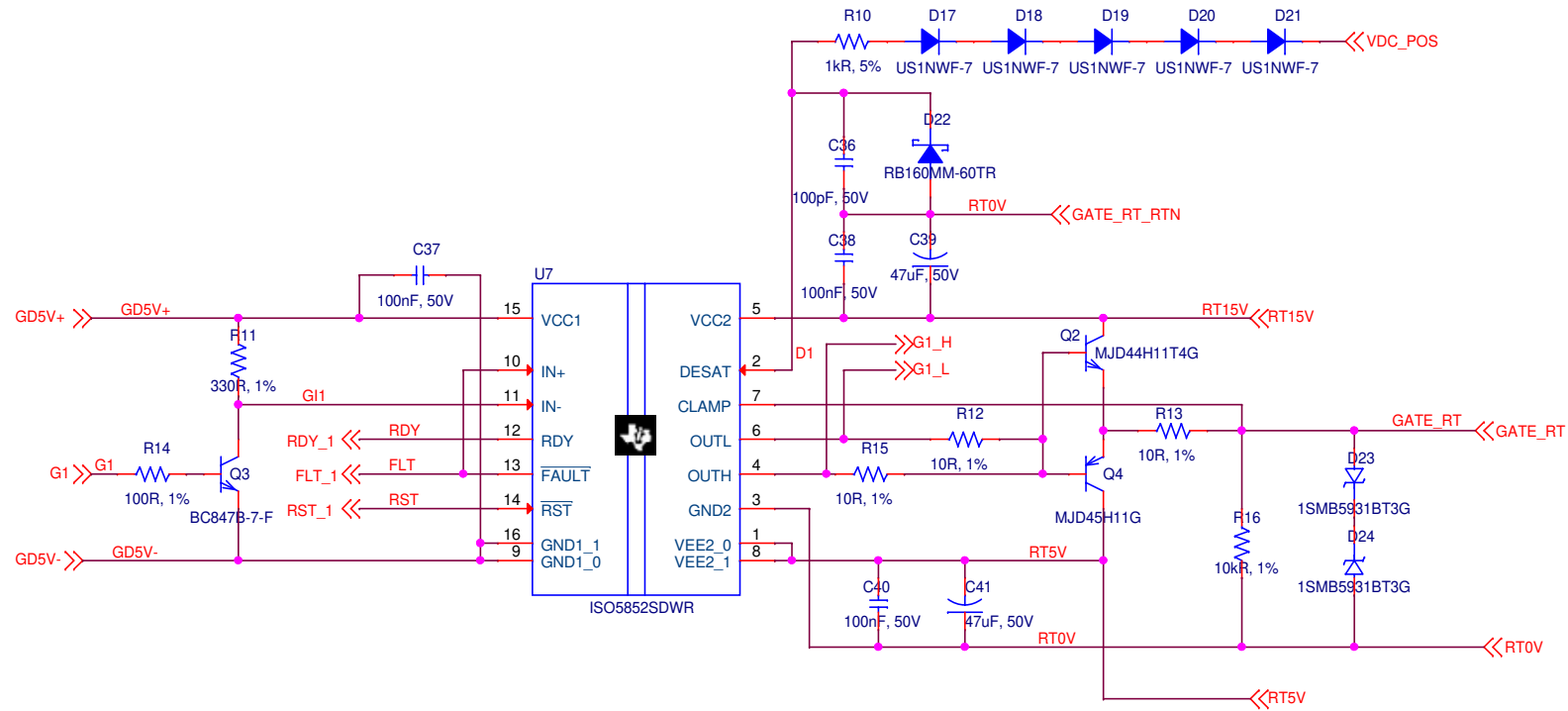
5V Power supplies



Innovative Invaders Technologies, Coimbatore.

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Page 06 Power Supply 5V		Variant Name <Core Design>	
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Gate Driver - R Top



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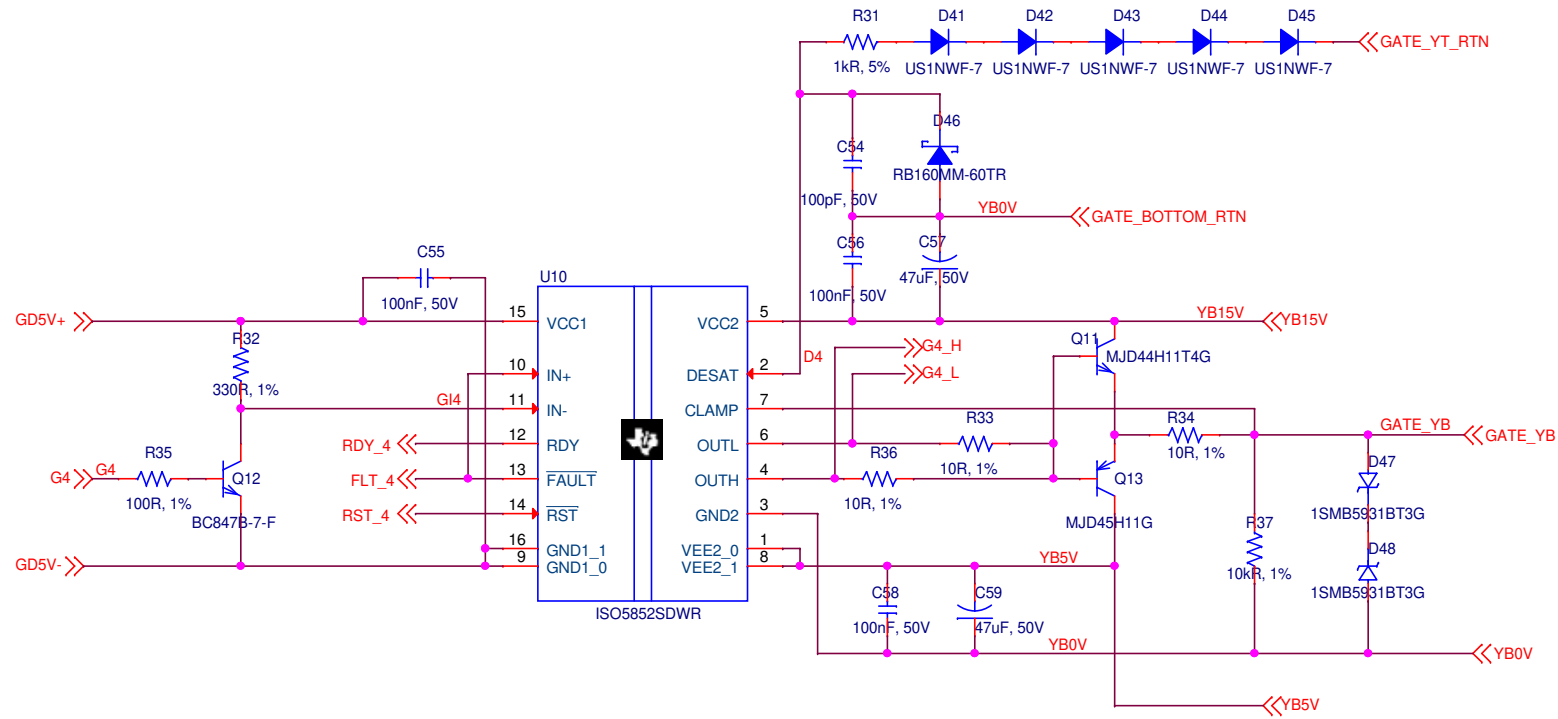
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Page 09 Gate Driver Y Phase Top		Variant Name <Core Design>	
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Gate Driver - Y Bottom



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Title Inverter V3

Page 10 Gate Driver Y Phase Bottom

Variant Name
<Core Design>

Size A4

Document <Doc>

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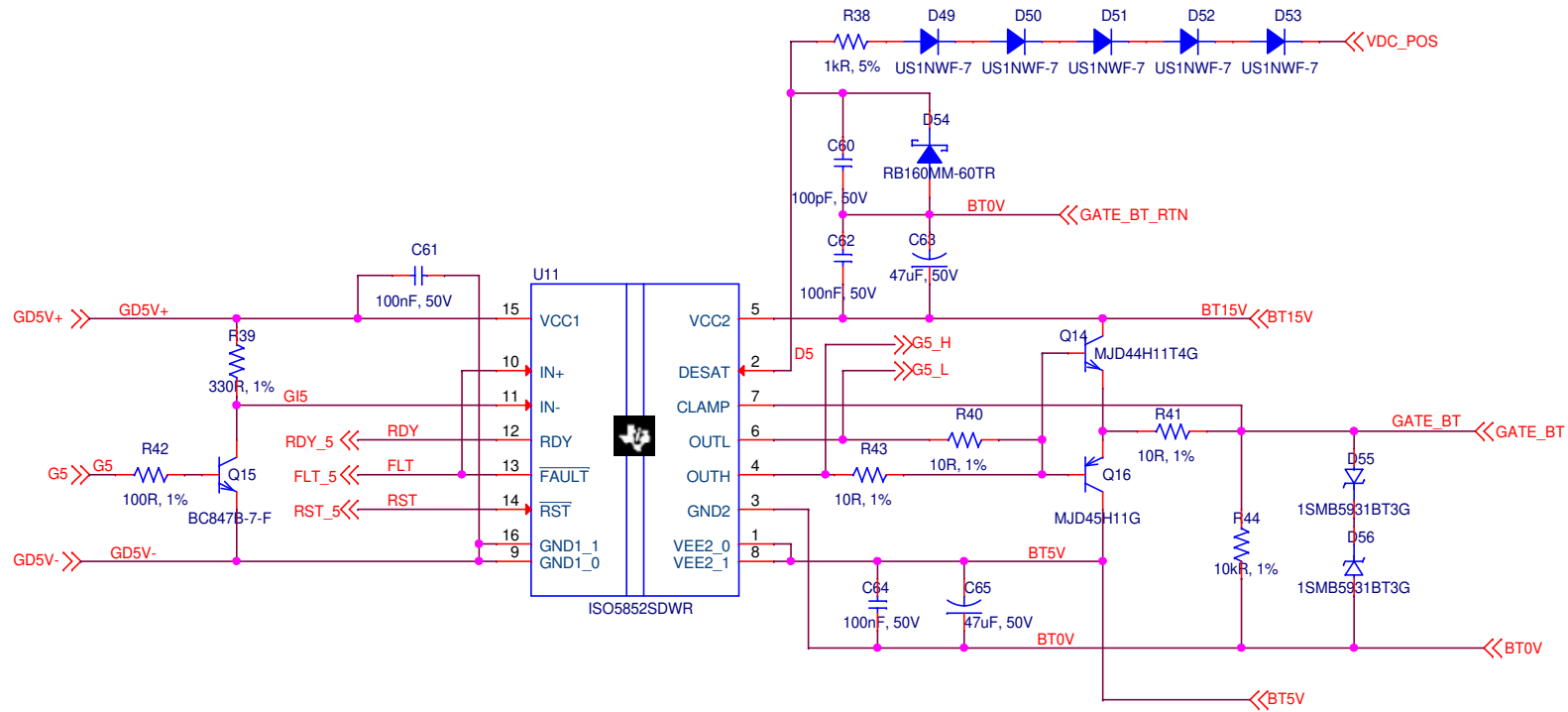
Designed by Rajasekaran

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Gate Driver - B Top



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Title Inverter V3

Page 11 Gate Driver B Phase Top

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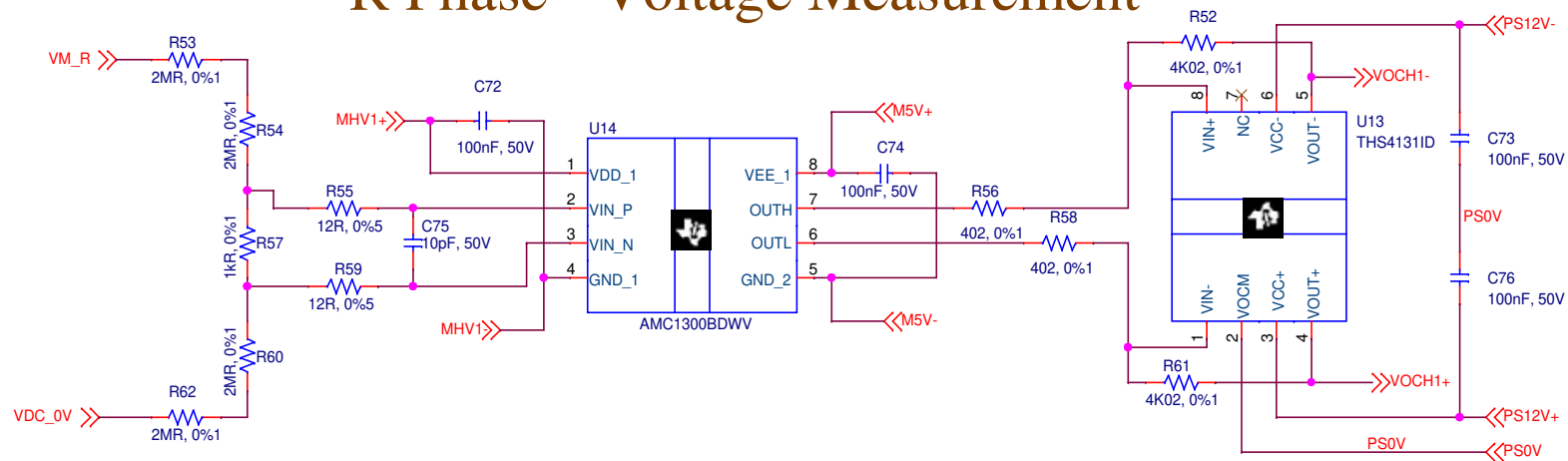
Gate Driver - B Bottom

The diagram illustrates the Gate Driver - B Bottom circuit. It features an ISO5852SDWR isolator (U12) with pins 15 (VCC1), 10 (IN+), 11 (IN-), 12 (RDY), 13 (FAULT), 14 (RST), 16 (GND1_1), and 9 (GND1_0). The output side includes pins 5 (VCC2), 2 (DESAT), 7 (CLAMP), 6 (OUTL), 4 (OUTH), 3 (GND2), 1 (VEE2_0), and 8 (VEE2_1). The circuit is powered by GD5V+ and GD5V- through a 330R resistor (R46) and a 100nF capacitor (C67). The output of the driver is connected to a MOSFET (Q17, MJD44H11T4G) and a diode (D62, RB160MM-60TR) through a 100pF capacitor (C66) and a 100nF capacitor (C68). The MOSFET is driven by a gate driver (Q19, MJD45H11G) with a 10R resistor (R47) and a 10R resistor (R48). The output of the gate driver is connected to a 10k resistor (R51) and a 100nF capacitor (C70). The output of the MOSFET is connected to a 10k resistor (R51) and a 100nF capacitor (C70). The output of the MOSFET is connected to a 10k resistor (R51) and a 100nF capacitor (C70). The output of the MOSFET is connected to a 10k resistor (R51) and a 100nF capacitor (C70).

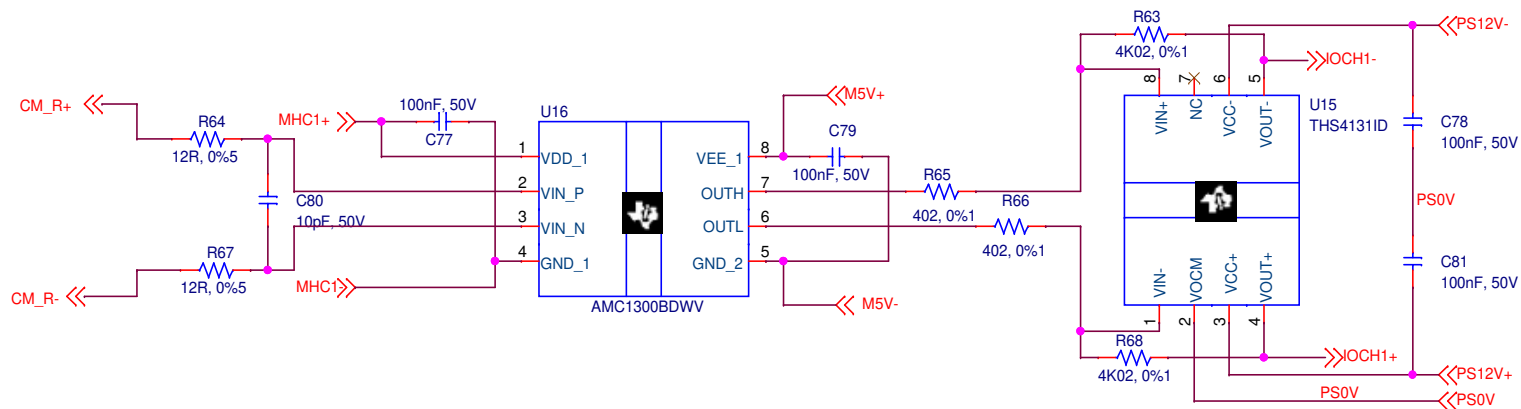
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Title Inverter V3			
Page 12 Gate Driver B Phase Bottom		Variant Name <Core Design>	
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R Phase - Voltage Measurement



R Phase - Current Measurement



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Title Inverter V3

Page 14 R Phase V I Measurement

Variant Name
<Core Design>

Size A4

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Rev <RevCode>

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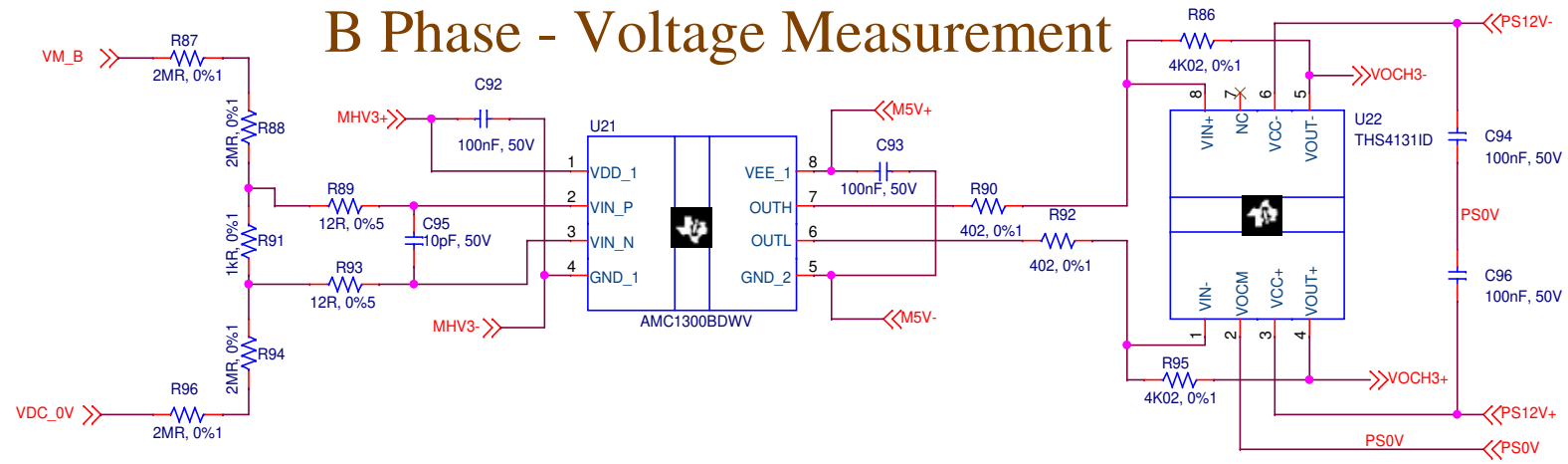
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Y Phase - Voltage Measurement

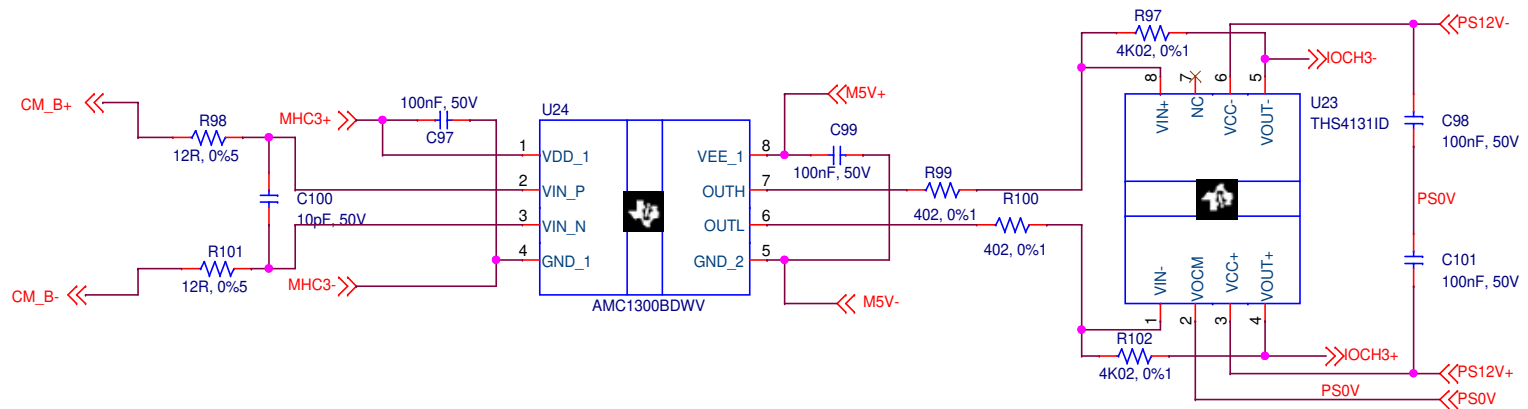
The diagram illustrates the Y Phase Voltage Measurement circuit. It features an AMC1300BDWV (U18) and a THS4131ID (U17). The circuit includes several resistors (R70, R71, R72, R74, R76, R77, R79) and capacitors (C82, C84, C85, C83, C86). The input signals are VM_Y and VDC_0V. The output signals are VOCH2+ and VOCH2-. The circuit is powered by PS12V-, PS0V, PS12V+, and PS0V.

Innovative Invaders Technologies, Coimbatore.				
Title Inverter V3				
Page 15 Y Phase V I Measurement			Variant Name <Core Design>	
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B Phase - Voltage Measurement



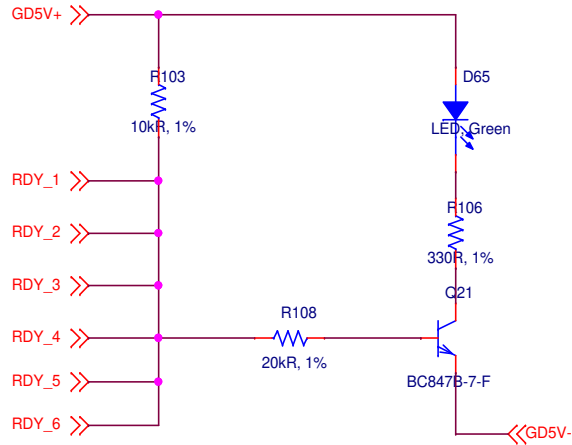
B Phase - Current Measurement



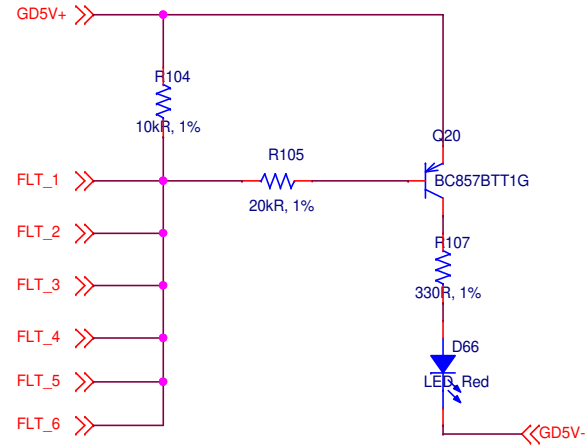
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Title Inverter V3			
Page 16 B Phase V I Measurement			Variant Name <Core Design>
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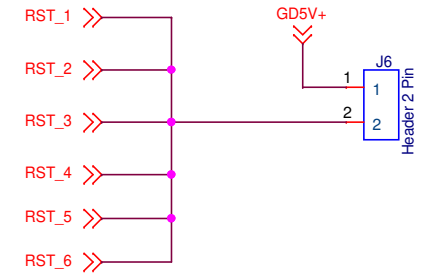
Ready Indicators



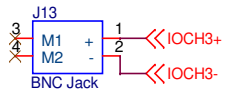
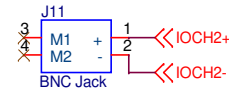
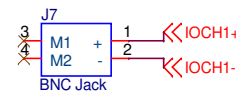
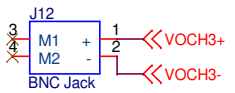
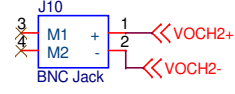
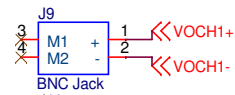
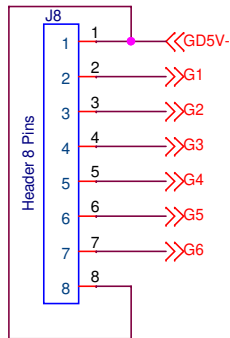
Fault Indicators



Reset Control



Connectors



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Title 3 Leg 2 Level Converter

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Document

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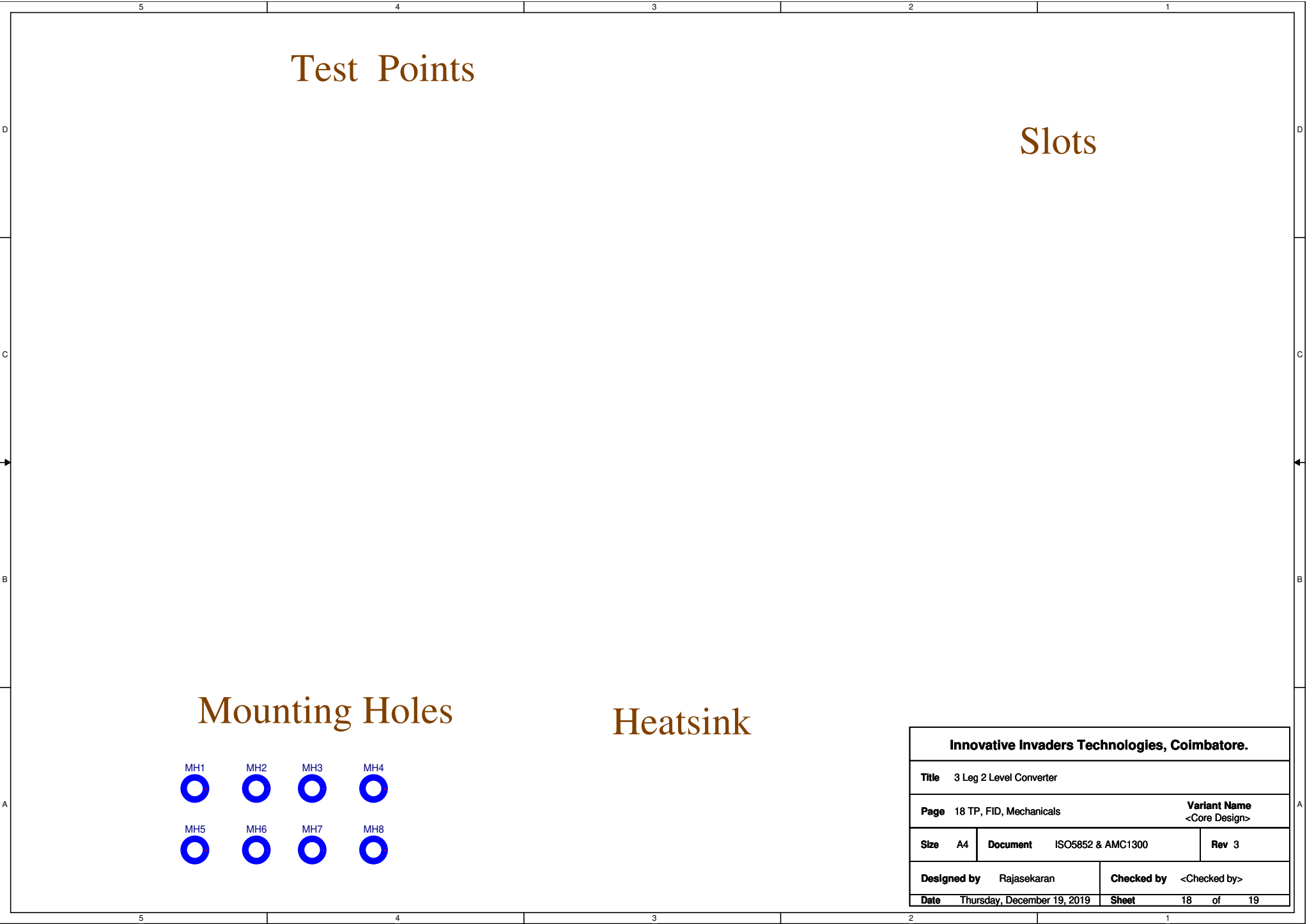
Rev 3

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Test Points

Slots

Mounting Holes

Heatsink



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Revision History

AMC1300 Power supplies are chaged from driver 5V output to LDO

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Title 3 Leg 2 Level Converter			
Page 19 Revision History			Variant Name <Core Design>
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