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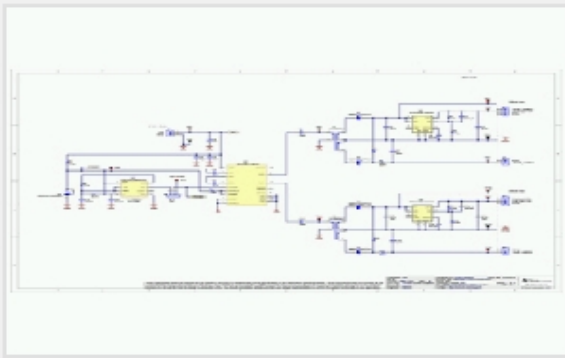
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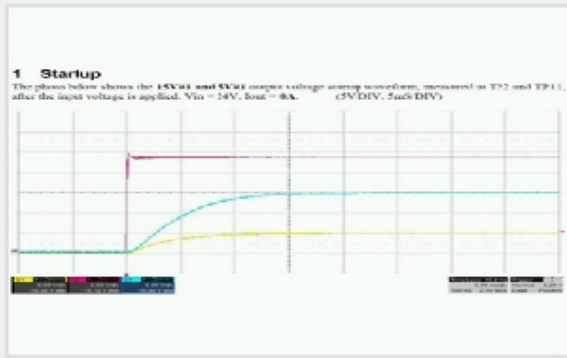
Dual isolated half-bridge converters are implemented using a single DRV8801 motor driver controller. The DRV8801 controller operates from a 24Vdc input and at a fixed 50% duty, generated using the low cost LMC555 timer. Transformer secondaries are rectified and regulated to 5V and 15V outputs using TP5A4901 linear regulators, which supply 0.15A each. This method allows the opto-coupler to be eliminated, reducing cost and complexity. Design options allow single or dual outputs per transformer.

- Isolated (3KV) outputs without opto-coupler feedback
- One DRV8801 motor drive controller can drive two transformers

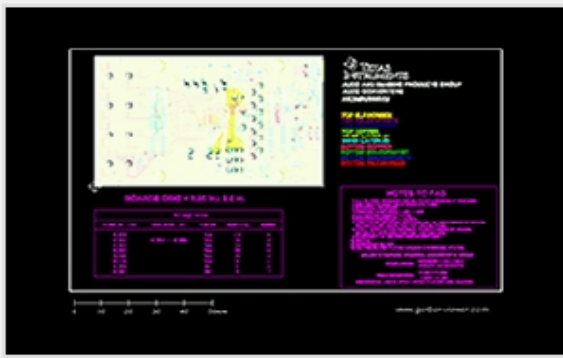
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	PMP11373.1 (Output Voltage 1)	PMP11373.2 (Output Voltage 2)
Vin (Min) [V]	21.6	21.6
Vin (Max) [V]	26.4	26.4
Vout (Nom) [V]	15	5
Iout (Max) [A]	.15	.15
Output Power [W]	2.25	.75
Isolated/Non-Isolated	Non-Isolated	Non-Isolated
Input Type	DC	DC
Topology	Half Bridge	Half Bridge

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Part Number	Name	Product Family	Sample & Buy	Design Kits & Evaluation Modules
DRV8801	2.8A Brushed DC Motor Driver with Current Sense (PH/EN Ctrl)	Brushed DC (BDC) Drivers	Sample & Buy	View Design Kits & Evaluation Modules
LM4040C50	5-V Precision Micropower Shunt Voltage Reference, 0.5% accuracy	Voltage Reference	Sample & Buy	Not Available
LMC555	World's smallest 555 timer with low power, high accuracy and a Fmax of 3MHz	Clock and Timing	Sample & Buy	Not Available

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Part #	Package Pins	CAD File (.bxl)	STEP Model (.stp)
DRV8801	HTSSOP (PWP) 16	Download	Download
	WQFN (RTY) 16	Download	-
LM4040C50	SOT (DBZ) 3	Download	Download
	TO-92 (LP) 3	Download	Download
	SOT (DCK) 5	Download	Download
TPS7A49	HVSSOP (DGN) 8	Download	-

Texas Instruments and Accelerated Designs, Inc. have collaborated together to provide TI customers with schematic symbols and PCB layout footprints for TI products.

Step 1: Download and install the [free download](#).

Step 2: Download the Symbol and Footprint from the CAD.bxl file table.

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User guides (1)

Title	Abstract	Type	Size (KB)	Date	Views	TI Recommends
PMP11373 Test Results		PDF	1831	30 Mar 2016	61	✓

Title	Abstract	Type	Size (KB)	Date	Views
PMP11373 Gerber		ZIP	334	30 Mar 2016	17
PMP11373 Altium		ZIP	33833	30 Mar 2016	35
PMP11373 PCB		PDF	525	30 Mar 2016	22
PMP11373 Assembly Drawing		PDF	104	30 Mar 2016	19
PMP11373 BOM		PDF	123	30 Mar 2016	41
PMP11373 Schematic		PDF	182	30 Mar 2016	166

- Analog Input Module
- Analog Output Module
- Digital Input Module

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