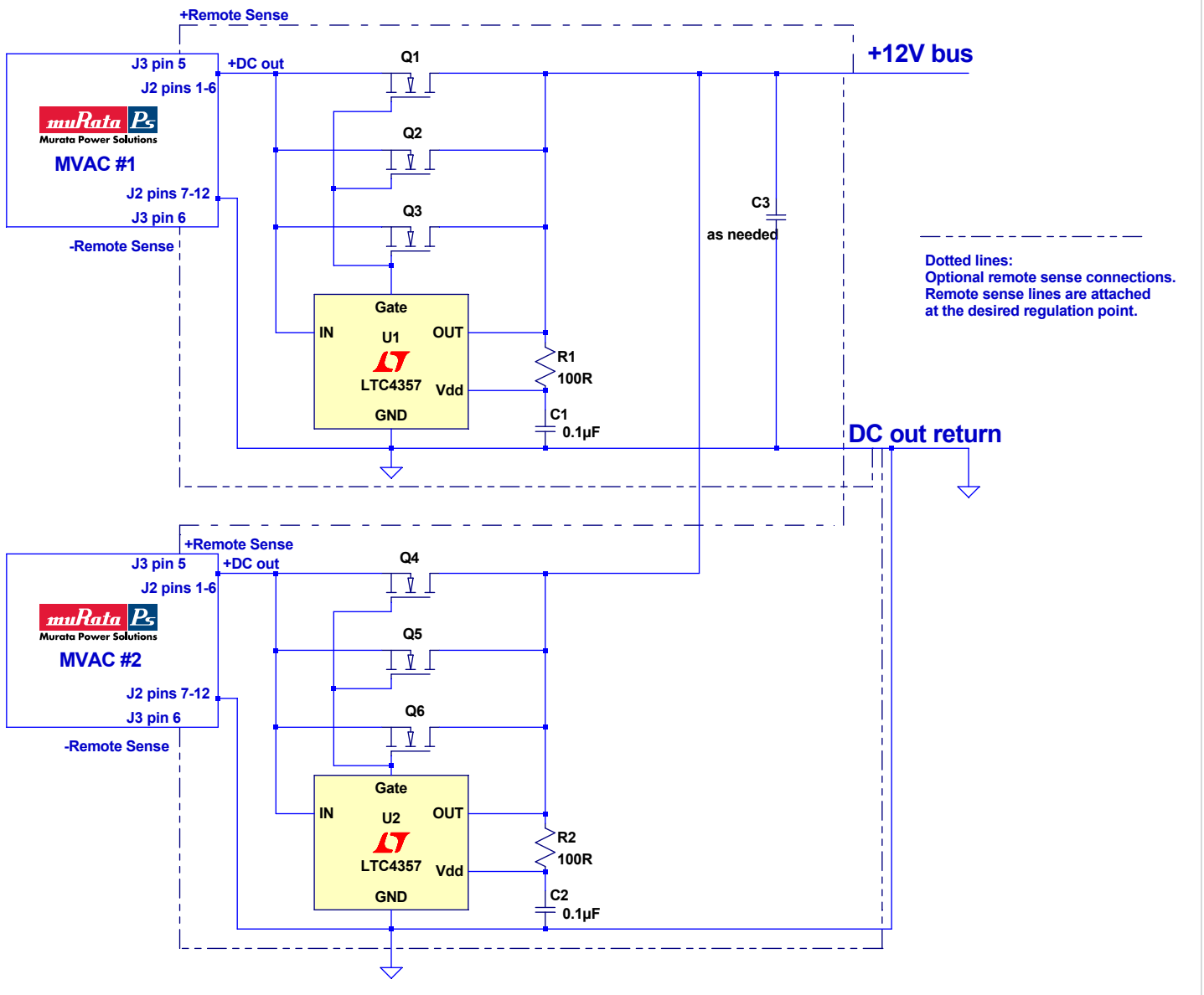


DESCRIPTION

ORing isolation is not required to achieve sharing of current between paralleled power supplies, but may be desired for redundancy in case of a power supply fault. The reference design in the schematic below shows how it may be implemented for the full-power main output, using FETs for low voltage drop. For the lower current fan (V2) and auxiliary (V3) outputs, ORing is most easily implemented with diodes rated to handle the reverse voltage, the power required by reverse voltage and diode leakage current at maximum temperature, and the forward current. Paralleled fan (V2) outputs must be limited to 12W total, paralleled Aux (V3) outputs must be limited to 10W total. If the Aux (V3) outputs are to be connected in parallel, ORing devices must be used to guarantee start-up of both units.

Customers are invited to contact a Murata Electronics FAE with any questions.

SCHEMATIC



BILL OF MATERIALS

ORing Circuit Suggested Parts List:

	MVAC400-12AFD or MVAC250-12AFD	MVAC400-24AFD or MVAC250-24AFD	MVAC400-48AFD or MVAC250-48AFD	Vendor
U1,2	LTC4357	LTC4357	LTC4357	Linear Technology
Q1-6	RJK0329DPB-01	HAT2139H	HAT2201R	Renesas
R1,2	100 Ohms	100 Ohms	100 Ohms	
C1,2	0.1uF, 25V	0.1uF, 50V	0.1uF, 100V	Murata
C3	As Required	As Required	As Required	

Notes:

For 12V applications, logic level power MOSFETs must be used. Fewer parallel FETs can be used depending on airflow, allowable operating temperature, and actual worst case loading conditions. For additional design information, simulation tools, and application notes, please go to: www.linear.com/product/LTC4357

