

User-Selectable Options (Figures 3 to 5)

Component pads are included to enable a variety of user-selectable circuits to be added to the amplifier inputs, the VREF input, outputs and the amplifier feedback loops. The outputs (Figure 3) have additional resistor and capacitor placements for loading.

A voltage divider and filter option (Figure 4) can be added to establish a power supply-tracking common mode reference at the VREF input. The inverting and non-inverting inputs have additional resistor placements for adding input attenuation, or to establish input DC offsets through the VREF pin.

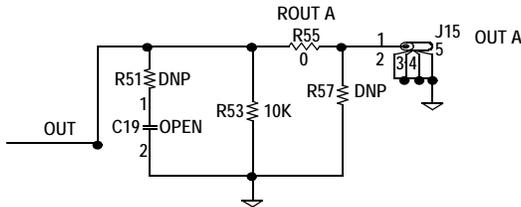


FIGURE 3. 1/2 OUTPUT STAGE

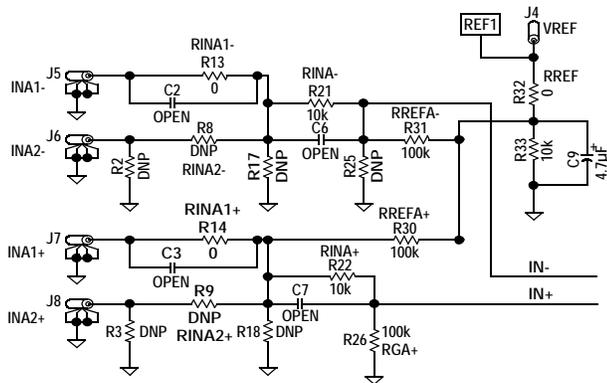


FIGURE 4. 1/2 INPUT STAGE

In the standard configuration (Figure 5), R₄₁ and R₄₅ are RF feedback resistors for the two independent amplifiers, set for AV = 10. Resistors R₄₇ and R₄₈ connect the DUT output to the output circuit (Figure 3). The additional unpopulated components, R₃₄ to R₃₉, R₄₂ to R₄₄, C₁₀, C₁₁, C₁₃ to C₁₅ and C₁₈ allow the user to configure the board for a variety of other applications such as cascaded gain stages, active feedback loops, etc.

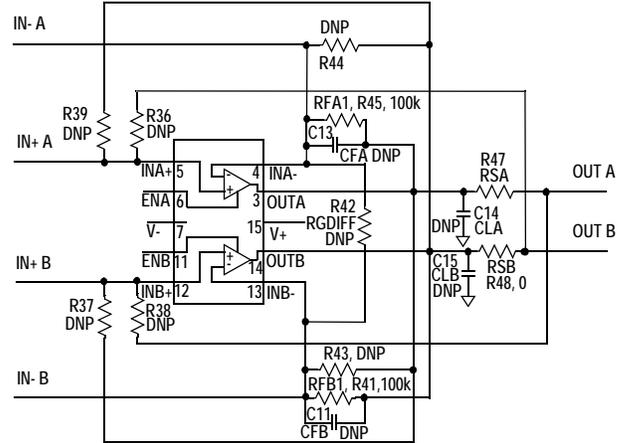
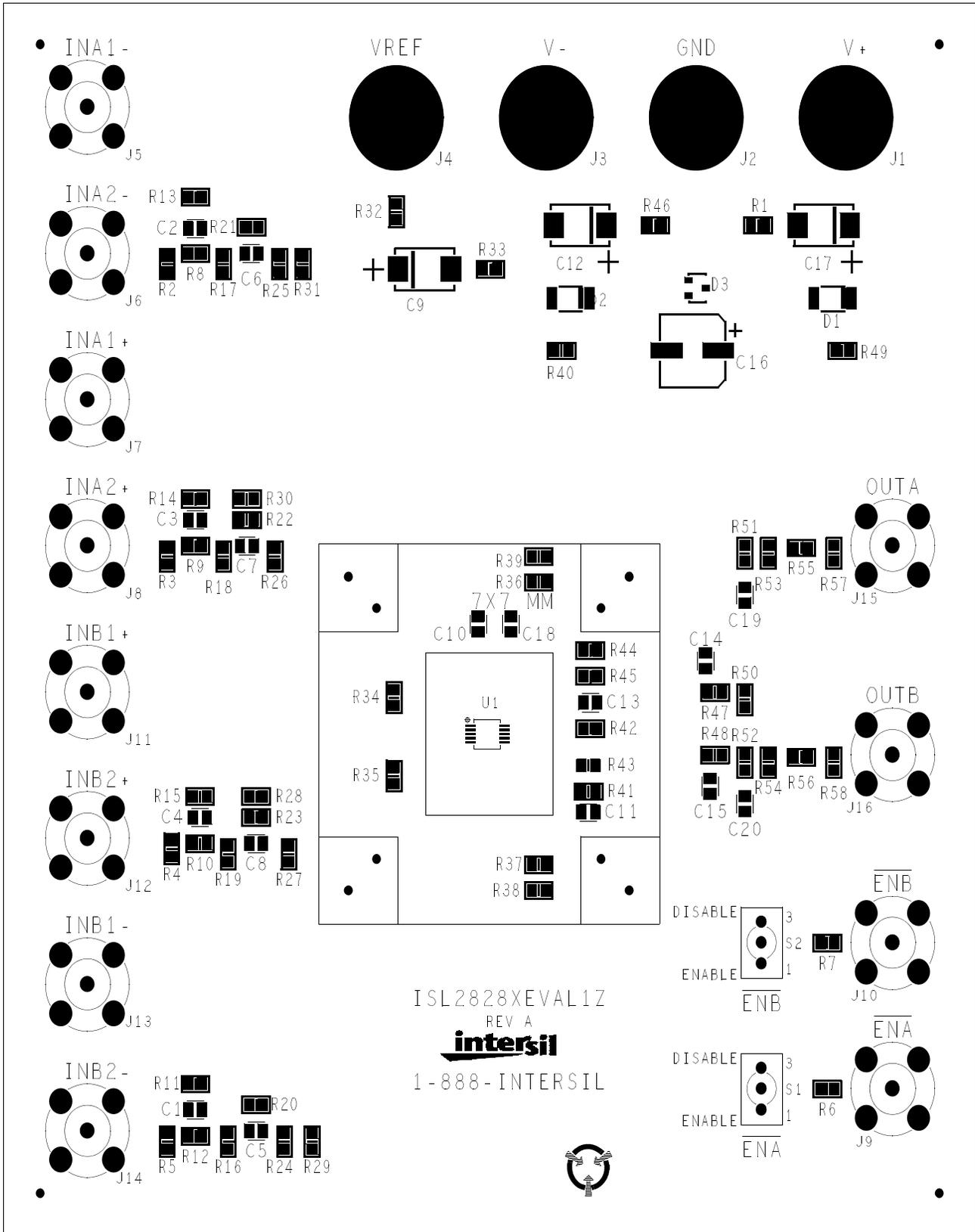


FIGURE 5. OPTIONAL COMPONENTS

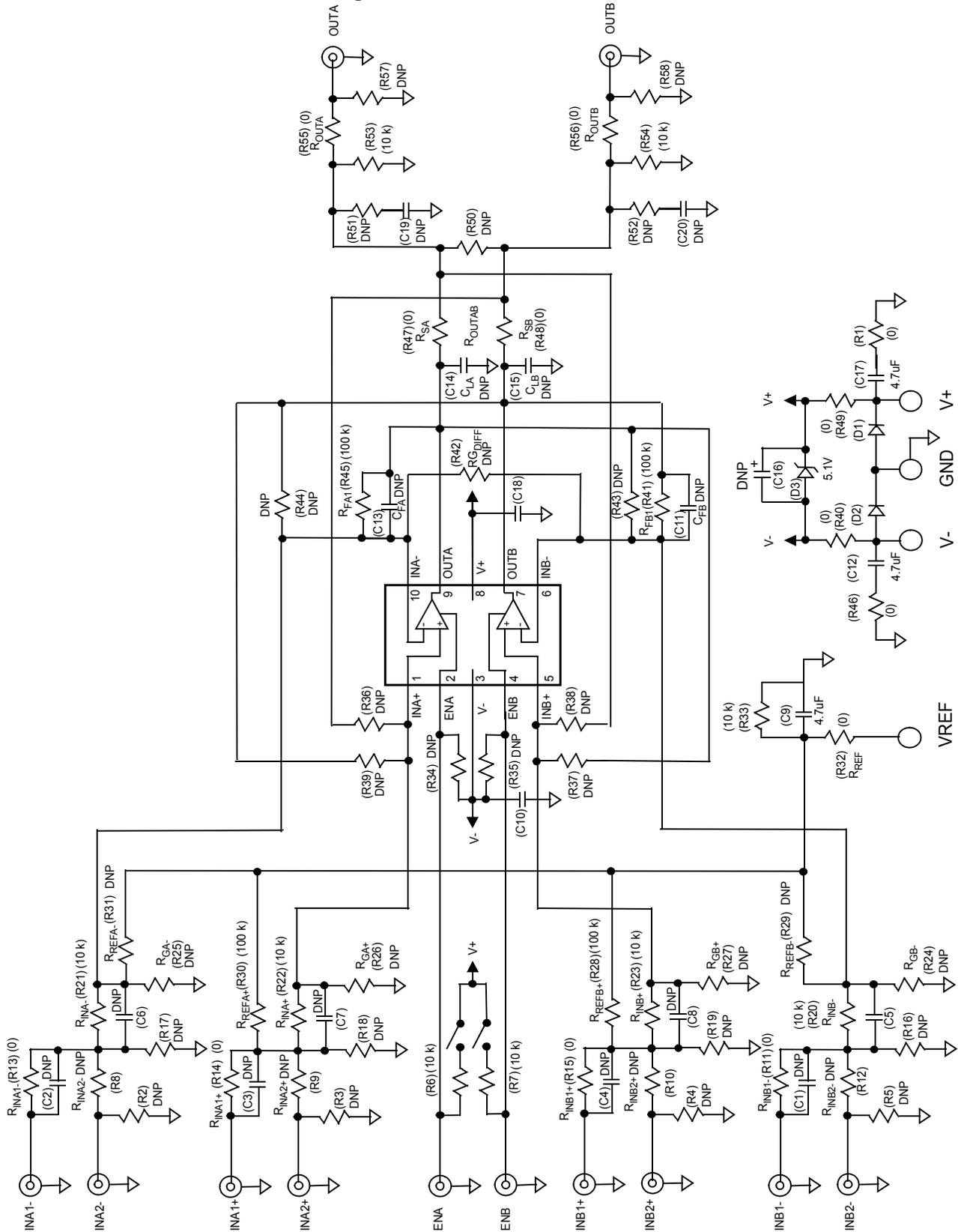
ISL2828xEVAL1Z Components Parts List

DEVICE NUMBER	DESCRIPTION	COMMENTS
C9, C12, C17	CAP-TANTALUM, SMD, D, 4.7µF, 50V, 10%, LOW ESR, ROHS	Power supply decoupling
C10,C18	CAP, SMD, 0603, 0.1µF, 25V, 10%, X7R, ROHS	Power supply decoupling
C6-C25	CAP, SMD, 0603, DNP-PLACE HOLDER, ROHS	User selectable capacitors - not populated
D1,D2	DIODE-RECTIFIER, SMD, SOD-123, 2P, 40V, 0.5A, ROHS	Reverse power protection
D3	DIODE-ZENER, SMD, SOD-123, 2P, 5.1V, 350mV, ROHS	Reverse power protection
U1 (ISL28286EVAL1Z)	ISL28286FAZ, IC-RAIL-TO-RAIL PRECISION OP AMP, 16P, QSOP, ROHS	
U1 (ISL28288EVAL1Z)	ISL28288FAZ, IC-RAIL-TO-RAIL PRECISION OP AMP, 16P, QSOP, ROHS	
R2-R5, R8-R10, R12, R16-R19, R24-R27, R29, R31, R34-R39, R42-R44, R50-R52, R57, R58	RESISTOR,SMD, 0603, 0.1%, MF, DNP-PLACE HOLDER	User selectable resistors - not populated
R1, R11, R13-R15, R24, R25, R32, R40, R46-R49, R55, R56	RES, SMD, 0603, 0W, 1/10W, TF, ROHS	0Ω user selectable resistors
R6, R7, R20-R23, R33, R53, R54	RES, SMD, 0603, 10k, 1/10W, 1%, TF, ROHS	RG gain resistors
R28, R30, R41, R45	RES, SMD, 0603, 100k, 1/10W, 1%, TF, ROHS	RF gain resistors

ISL2828xEVAL1Z Top View



ISL2828xEVAL1Z Schematic Diagram



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