3) populate R10 with 0-ohms
2) remove R11
1) replace C1 with 0 Ohm resistor

For external MCLK:
1) replace C1 with 0 Ohm resistor
2) remove R11
3) populate R10 with 0-ohms

Opamp and Headers for optional Opamp Daughter Card

External Amplifier Power

DAC I2C Address

3.5mm Headset Jack

On-Board Load

Interrupt LED

External Amplifier Power

DAC I2C Address

3.5mm Headset Jack

On-Board Load

Interrupt LED
For external MCLK:
1) replace C38 with 0 Ohm resistor
2) remove R28
3) populate R39 with 0-ohms

External Amplifier Power
populate R40 and R41 with 0-ohms for external VCP_FILT +/- supplies

DAC I2C Address
12C Write/Read: 0x62/0x63

XLR Differential Output
POPULATE ON J31 SHORTING J31.1 TO J31.3 AND J31.2 TO J31.4

Interrupt LED
LED illuminated when INT.QFN=0

On-Board Load
POPULATE ON J31.1-J31.2
GANG must be pulled-up/down with 100K because pin becomes an output shortly after RESET.

For the 28-Pin package, the 3.3V output from the external regulator has to be connected to VREG, VCC_A and VCC_D. The VCC pin has to be left open with no connection.

From the external input 3.3V, 1.8V is internally generated for the chip's internal usage.
Power Options and Current Measurement

Testpoints

Hardware
Programmable Delay Reset

- Output valid at VDD of 0.8V (worst case)
- Release delay = 20 ms
- Release delay = (0.2V/0.8V + 1) x 0.405V = 0.917V
- SENSE threshold (neg, typ) = 0.917V + 1.0175 = 0.9336V
- SENSE threshold (pos, max) = 0.917V + 1.0375 = 0.9519V
- V_R (min) = 0.7xVDD = 3.5V
- Internal pull-up resistance = 90Ohms typ

RESET release delay = 20 ms
SENSE threshold (neg) = (10.2K/8.06K + 1) x 0.405V = 0.9175V
SENSE threshold (pos, typ) = 0.9175V x 1.0175 = 0.9336V
SENSE threshold (pos, max) = 0.9175V x 1.0375 = 0.9519V

RESET output valid at VDD of 0.8V (worst case)

MR V_IL (max) = 0.3xVDD = 1.5V
MR V_IH (min) = 0.7xVDD = 3.5V
MR internal pull-up resistance = 90kOhms typ

C90 0.1uF X7R
C91 NO POP 0402
C103 0.01UF X7R

RESET 3
MR 2
SENSE 4
CT 6
VDD 5

U3 NCP308SNADJT1G

DAC RESET

R99 47k
R103 14K
R114 2.21K

C180 0.1uF X7R
C181 0.1uF X7R
C182 0.1uF X7R
C184 0.1uF X7R
C185 0.1uF X7R
C189 0.1uF X7R
C190 0.1uF X7R