

Register 10—Fine I_{REF} Adjust (address = 0x0A) (Read/Write)

BIT #	D7	D6	D5	D4	D3	D2	D1	D0
BIT Name	FG7	FG6	FG5	FG4	FG3	FG2	FG1	FG0

This register sets the code to the 8-bit fine DAC that adjust the magnitude of both reference currents. The DAC output value has a bipolar range (for each reference current) and can be calculated using the equations in Table 1.

Bit Descriptions

FG: Fine I_{REF} Adjust (Bits 7-0)

These bits set the code of the fine DAC that adjusts the magnitude of both reference currents.

	REFERENCE CURRENT
OVERALL	$I_{REF1,2} = I_{REF PROGRAM} + I_{REF COARSE} + I_{REF FINE}$
PROGRAM	$I_{REF PROGRAM} = \frac{5V_{REF}}{R_{SET}}$
COARSE DAC	$I_{REF COARSE} = \frac{V_{REF}}{R_{SET}} \cdot \frac{N_{11}}{64}$
FINE DAC	$I_{REF FINE} = \frac{V_{REF}}{R_{SET}} \cdot \frac{N_{10}}{1024}$
NOTE: N ₁₁ and N ₁₀ are the decimal values of registers 11 and 10, respectively.	

Table 1. Equations for Calculating the Values of Each Reference Current