Register 13—Coarse Zero Adjust (address = 0x0D) (Read/Write)

BIT #	D7	D6	D5	D4	D3	D2	D1	D0
BIT Name	CZ7	CZ6	CZ5	CZ4	CZ3	CZ2	CZ1	CZ0

This register sets the code to the 8-bit coarse DAC that adjust the magnitude of the zero output currents. Equations are given in Table 1. Negative numbers are in binary Two's Complement notation.

Bit Descriptions

FZ: Coarse Zero Adjust (Bits 7-0)
These bits set the code of the coarse DAC that adjusts the magnitude of the zero output currents.

	VOLTAGE REFERRED TO V_O PIN WITH RESPECT TO I_{RET}	CURRENT REFERRED TO I_{OUT} PIN
OVERALL	$V_{ZERO} = V_{Z\ PROGRAM} + V_{Z\ COARSE} + V_{Z\ FINE}$	$I_{ZERO} = I_{Z\ PROGRAM} + I_{Z\ COARSE} + I_{Z\ FINE}$
PROGRAM	$V_{Z\,PROGRAM} = \frac{3.5V_{REF}}{8}$	$I_{Z\,PROGRAM} = \frac{175V_{REF}}{8R_{VI}}$
COARSE DAC	$V_{Z\,COARSE} = \frac{V_{REF}}{80} \bullet \frac{N_{13}}{4}$	$I_{Z\,COARSE} = \frac{5V_{REF}}{8R_{VI}} \bullet \frac{N_{13}}{4}$
FINE DAC	$V_{Z\,FINE} = \frac{V_{REF}}{80} \bullet \frac{N_{12}}{64}$	$I_{Z\,FINE} = \frac{5V_{REF}}{8R_{VI}} \bullet \frac{N_{12}}{64}$
NOTE: N_{13} and N_{12} are assigned decimal values of registers 13 and 12, respectively.		

Table 1. Equations for Calculating Zero Output