

B#: Hex to Dec, Dec to Hex Conversion

1. Measured Voltage (Hex2Dec)

Reference voltage low: 0V

Reference voltage high: 5V

Resolution: 10bit

Offset: TBD

Dec Voltage Value = Hex2Dec (Hex Voltage Value) / 1024 * 5 ± Offset

Both low and high reference voltage can be changed using proper register values

Reference Voltage Range: 1.23V~12.40V

2. Emulated Voltage (Dec2Hex)

Resolution: 12bit

Output Voltage Range: 0V ~ 4.8V

Offset: TBD

Vdac = 4.86V – Dec Voltage Value

Vdac = Hex Voltage Value / 0xFFF(4096) * 5V

Hex Voltage Value = Hex2Dec ((4.86 – Dec Voltage Value) * 4096 / 5) ± Offset

3. Measured Current (Hex2Dec)

Resolution: 12bit

Current Range: 0 ~ 500mA (can be changed upto 3A)

Offset: TBD

Dec Current Value = Hex2Dec (Hex Current Value) / 1024 * 5 / 10 ± Offset