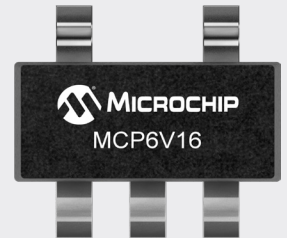


MCP6V16/6U/7/9

7.5 μ A, 80 kHz Zero-Drift Op Amps

General Information

The MCP6V16/6U/7/9 family of operational amplifiers provides input offset voltage correction for very low offset and offset drift. These are low power devices, with a gain bandwidth product of 80 kHz. They are unity gain stable, have no 1/f noise, and provide superior CMRR and PSRR performance. These products operate with a single supply voltage as low as 1.6V, while drawing 7.5 μ A/amplifier (typical) of quiescent current.



Features

- High DC Precision:
 - Vos Drift: ± 150 nV/ $^{\circ}$ C (maximum)
 - Vos: ± 25 μ V (maximum)
 - AOL: 102 dB (minimum, $V_{DD} = 5.5$ V)
 - PSRR: 108 dB (minimum, $V_{DD} = 5.5$ V)
 - CMRR: 109 dB (minimum, $V_{DD} = 5.5$ V)
 - Eni: 2.1 μ VP-P (typical), $f = 0.1$ Hz to 10 Hz
 - Eni: 0.67 μ VP-P (typical), $f = 0.01$ Hz to 1 Hz
- Low Power and Supply Voltages:
 - IQ: 7.5 μ A/amplifier (typical)
 - Wide Supply Voltage Range: 1.6V to 5.5V
- Small Packages:
 - Singles in SC70, SOT-23
 - Duals in MSOP-8, 2x3 TDFN
 - Quads in TSSOP-14

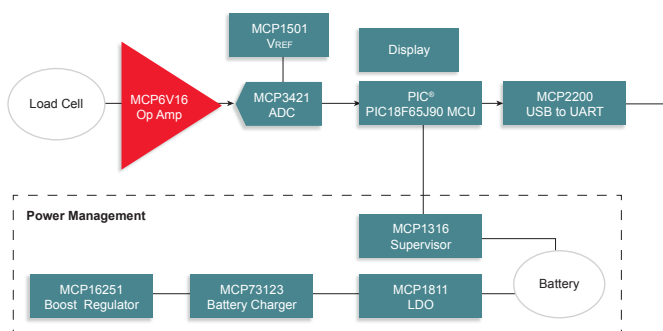
Applications

- Portable Instrumentation
- Sensor Conditioning
- Temperature Measurement
- DC Offset Correction
- Medical Instrumentation

Benefits

- Industry leading performance permits measuring small signals with less error
- Power consumption as little as 12 μ W per channel while providing 80 kHz of gain bandwidth product enables high linearity even at high gains without compromising the power budget
- The ultra-low drift architecture provides reliable, accurate measurements across a wide range of environmental conditions

Weigh Scale



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