## CS51 0

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The CS5160 is a 5 bit synchronous dual N Channel buck controllers designed to provide unprecedented transient response for today's demanding high density, high speed logic. It operates using a proprietary control method which allows a 100 ns response time to load transients. The CS5160 is designed to operate over a 9 16 V range (V $_{\rm CC}$ ) using 12 V to power the IC and 5.0 V as the main supply for conversion.

The CS5160 is specifically designed to power Pentium® III processors and other high performance core logic. They include the following features: on board 5 bit DAC, short circuit protection, 1.0% output tolerance,  $V_{CC}$  monitor, and programmable Soft Start capability. The CS5160 is available in a 16 pin surface mount package.

## **Features**

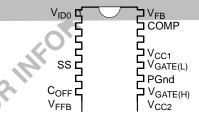
- Dual N Channel Design
- Excess of 1.0 MHz Operation
- 100 ns Transient Response
- 5 Bit DAC
- Backward Compatible with CS515X Family
- 30 ns Gate Rise/Fall Times
- 0.8% DAC Accuracy for the 01111 DAC Code
- 5.0 V & 12 V Operation
- Remote Sense
- Programmable Soft Start
- Lossless Short Circuit Protection
- V<sub>CC</sub> Monitor
- V<sup>2™</sup> Control Topology
- Overvoltage Protection



## http://onsemi.com

MARKING DIAGRAMS

A = Assembly Location
WL, L = Wafer Lot
YY, Y = Year
WW, W = Work Week



## **ORDERING INFORMATION**

Device	Package	Shipping
CS5160GD16	SO-16	48 Units/Rail
CS5160GDR16	SO-16	2500 Tape & Reel

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