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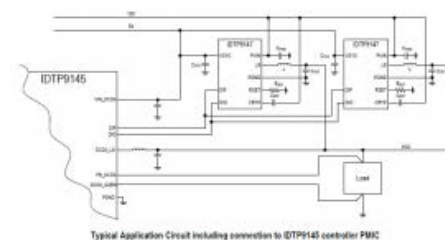
Status: **Active**

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IDTP9145
Programmable Multi-Channel PMIC with
SVID

The IDTP9145 is a programmable, multi-channel power management IC (PMIC) designed for the Intel® Atom™ SoC to meet high performance requirements and provide high-feature integration to minimize system board area and BOM cost. The PMIC includes subsystems for voltage regulation, power sequencing management, A/D conversion, GPIOs, PWMs and others. The IDTP9145 device is controlled and programmed by using an I2C that operates in-conjunction with the SoC. There is also a serial voltage ID (SVID) interface between the SoC and PMIC for handling VCC, VNN & VDDQ voltage rail settings and system control signals. The output current capability of the IDTP9145 solution can be increased by adding IDT's intelligent, scalable, distributed power sources ([IDTP9147](#)).



Features

- Seven programmable current-mode step-down converters
- Supports **IDTP9147** add-on distributed power sources
- Seven general purpose LDOs
- SVID interface supporting IMVP7 protocol
- 10-bit ADC, 16 programmable GPIOs and 12 programmable Enable Outputs
- Host interface and system management functions
- High-speed I2C interface
- OTP-programmable default power sequence and settings
- 100-ld 8x8mm dual-row QFN

Product Specification

Function	Supply Voltage (V)	Switching Frequency (MHz)	Switching Regulators	LDOs	GPIOs (#)	Comm. Interface	Advanced Features
PMIC, Power controller	4.50 - 5.50	2.00	7	7	16	High-speed I2C, SVID, 2-wire	Scalable output current, Coin Cell Charger, Analog to digital converter (ADC)

Product Options

Orderable Part ID	Part Status	Pkg. Code	Pkg. Type	Lead Count (#)	Carrier Type	Temp. Grade	Pb (Lead) Free	Sample & Buy
P9145-I0NAGI	Active	NAG100	HLA	100	TRAY	I	Yes	
P9145-I0NAGI8	Active	NAG100	HLA	100	Reel	I	Yes	

P9145-I0NQGI	Active	NQG100	VFQFPN	100	TRAY	I	Yes	
P9145-I0NQGI8	Active	NQG100	VFQFPN	100	Reel	I	Yes	

Documents

	Title	Type 	Format	File Size	Date
	IDTP9145 Preliminary Product Overview	Short Form Datasheet	PDF	95 KB	06/21/2013