Description

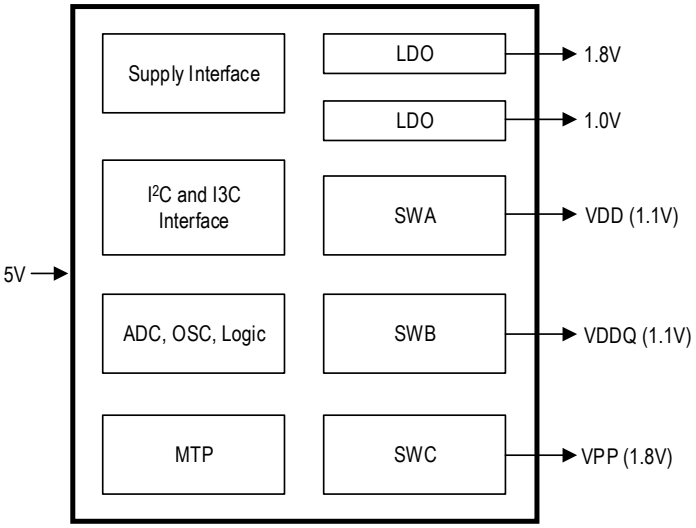
The P8911 is a power management IC (PMIC) designed for notebook, desktop, and embedded computing platforms. IDT's P8911 enables next-generation client platforms to take full advantage of DDR5 memory to realize greater performance, density, and reliability while reducing overall system power.

The P8911 has been optimized from the previously announced P8900 server PMIC to meet the specific needs of the client and embedded application spaces. With over 50% reduction in package footprint versus the P8900, the P8911 also features power delivery characteristics tailored toward smaller form factor memory modules that reside in systems that may operate on battery power for extended periods.

Typical Applications

Small outline and unbuffered DDR5-based dual in-line memory modules (DIMM)

Block Diagram

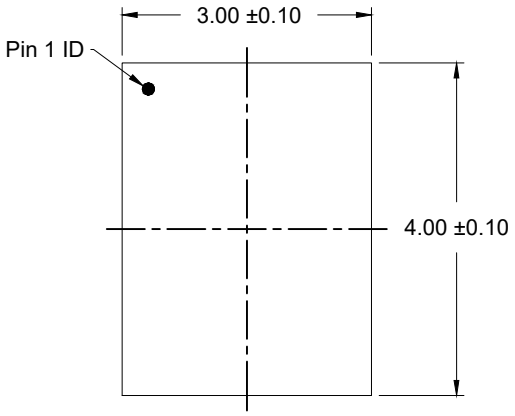


Features

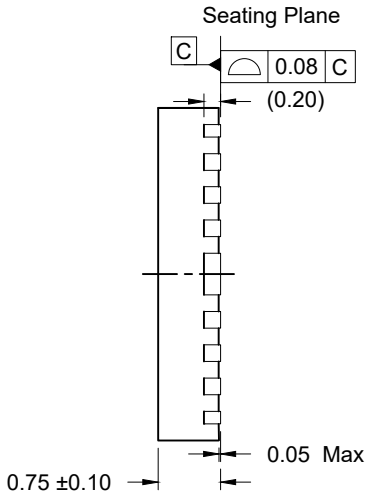
- VIN_Bulk input supply range: 4.25V to 5.5V
- Three step-down switching regulators: SWA, SWB, SWC
- Programmable dual phase and single phase regulator for SWA and SWB
- Multi-Time Programmable Non-Volatile Memory
- Error injection capability
- Persistent error log registers
- Two LDO regulators: VOUT_1.8V, VOUT_1.0V
- Secure Mode and Programmable mode of operation
- Independently programmable output voltages, power-up, and power-down sequence for switch regulators
- Output power good status reporting mechanism
- VIN_Bulk input supply protection feature: Input over voltage
- Flexible Open Drain IO (I²C) and Push Pull (I3C Basic) IO Support
- Flexible mechanism to enable switch regulators (w/VR_EN pin or VR Enable command on I²C or I3C Basic interface)
- Idle Power State (P1 State)
- 28-QFN, 3 × 4 mm package

Package Outline Drawing

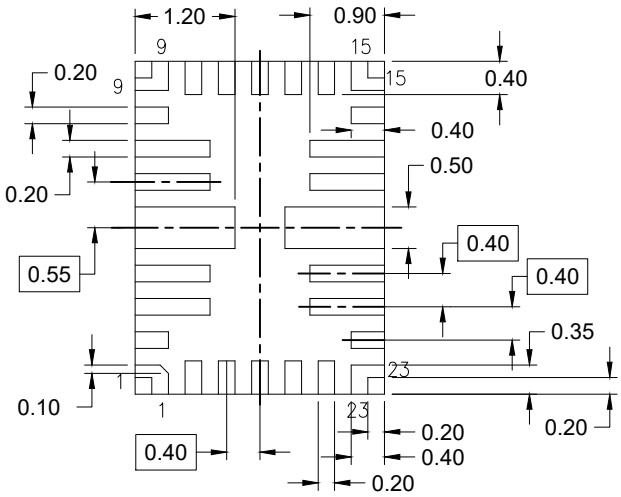
Package Code:FNG28D1
28-VFQFPN 3.0 x 4.0 x 0.75 mm Body, 0.4 mm Pitch (Min)
PSC-4818-01, Revision: 04, Date Created: Aug 25, 2022



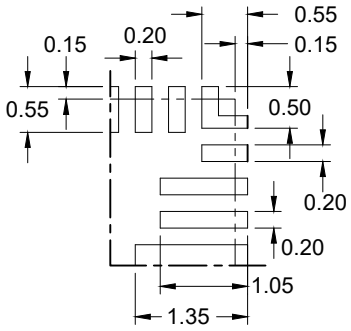
TOP VIEW



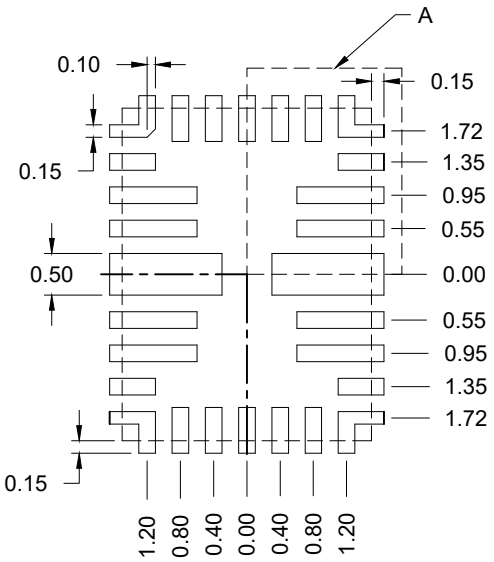
SIDE VIEW



BOTTOM VIEW



DETAIL A



RECOMMENDED LAND PATTERN
(PCB Top View, NSMD Design)

NOTES:

1. JEDEC compatible.
2. All dimensions are in mm and angles are in degrees.
3. Use ±0.05 mm for the non-toleranced dimensions.
4. Numbers in ( ) are for references only.

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