

## Low-IQ, Dual Sync Buck Converter with Load Switch

### Features

- ★ Power Solution for Low Power DDR5 and Low Power DDR4X memory System
- ★ 3.3V to 22V Operating Input Range
- ★ Low Quiescent Current
- ★ Output Current 10A(AVG)/14A(Peak) for VDD2
- ★ Output Current 1A(AVG)/3A(Peak) for VDDQ
- ★ Output Current 1A(AVG)/2.2A(Peak) for VDD1
- ★ Fast transient response and stable operation with POSCAP and/or all MLCCs
- ★ Optimized Power MOSFETs Designed for High Efficiency Performance
- ★ Internal Soft Start (SS)/Soft OFF and Output Discharge
- ★ Over-Current Limit (OCL), Over-Voltage Protection (OVP), Under-Voltage Protection (UVP), and Thermal Shutdown
- ★ RoHS Compliant and Halogen Free

### General Description

The PS2705 provides a highly integrated power solution tailored for Low Power DDR5 and Low Power DDR4X memory systems. This single-die solution incorporates dual synchronous buck converters, delivering 10A for VDD2 and 1A for VDDQ, alongside a load switch for efficient power management at 1.8V/1A for VDD1.

### Applications

- ★ Data Center/Storage
- ★ Communication Network System
- ★ Laptop Computers
- ★ Motherboard / Server

### Typical Application Circuit

