
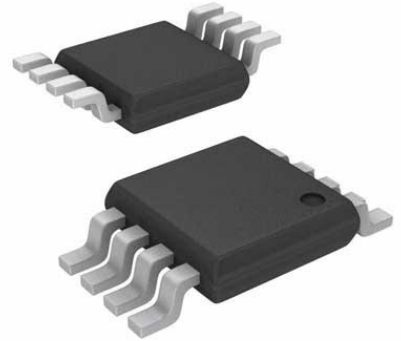


Voltage Level Translator 2-CH Bidirectional 8-Pin SSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	MSOP8
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The LP8733xx-Q1 is designed to meet the power management requirements in automotive applications. The device has two step-down DC/DC converters (which can be configured as a single dual-phase regulator or two single-phase regulators), two linear regulators, and two general-purpose digital-output signals. The device is controlled by an I²C-compatible serial interface and by an enable signal.

The automatic PWM/PFM (AUTO mode) operation together with the automatic phase adding/shedding gives high efficiency over a wide output-current range. The LP8733xx-Q1 supports remote voltage sensing (differential in dual-phase configuration) to compensate IR drop between the regulator output and the point-of-load (POL), thus improving the accuracy of the output voltage. In addition, the switching clock can be forced to PWM mode and also synchronized to an external clock to minimize the disturbances.

The LP8733xx-Q1 device supports programmable start-up and shutdown delays and sequences including GPO signals synchronized to the enable signal. During start-up and voltage change, the device controls the output slew rate to minimize output voltage overshoot and the in-rush current.

Key Features

AEC-Q100 qualified with the following results:

Device temperature grade 1: -40°C to +125°C ambient operating temperature

Input voltage: 2.8 V to 5.5 V

Two high-efficiency step-down DC/DC converters:

Output voltage: 0.7 V to 3.36 V

Maximum output current 3 A per phase

Adding and shedding auto phase and force multi-phase operations in dual-phase configuration

Remote differential feedback voltage sensing in dual-phase configuration

Programmable output-voltage slew rate from 0.5 mV/μs to 10 mV/μs

2-MHz switching frequency

Spread-spectrum mode and phase interleaving for EMI reduction

Two linear regulators:

Input voltage: 2.5 V to 5.5 V

Output voltage: 0.8 V to 3.3 V

Maximum output current 300 mA

Configurable general-purpose output signals (GPO, GPO2)

Interrupt function with programmable masking

Programmable power-good signal (PGOOD)

Output short-circuit and overload protection

Overtemperature warning and protection

Overvoltage protection (OVP) and undervoltage lockout (UVLO)

28-pin, 5-mm × 5-mm VQFN package with wettable flanks

Recommended For You

TCA9406DCUR

Texas Instruments, Inc

VSSOP8

TCA9406YZPR

Texas Instruments, Inc

DSBGA8

TCA39306DTMR

Texas Instruments, Inc

X2SON8

TCM5089N

Texas Instruments, Inc

DIP

TCA9416DTMR

Texas Instruments, Inc

X2SON8

TCA39306DCURQ1

Texas Instruments, Inc

VSSOP8

SN74S38N

Texas Instruments, Inc

DIP

SN7438N

Texas Instruments, Inc

DIP14

CD4070BE

Texas Instruments, Inc

DIP14

SN75462P

Texas Instruments, Inc

DIP8

CD74HCT138E

Texas Instruments, Inc

DIP16

CD4098BE

Texas Instruments, Inc

DIP

CD74HC08E

Texas Instruments, Inc

DIP

SN74F08D

Texas Instruments, Inc

SOP-14

SN74LS257BN

Texas Instruments, Inc

DIP16