



Semiconductor & Storage Products Home > Semiconductor > Power Management ICs > Low-Dropout Regulators (LDO Regulators) > Product detail

TCR3RM28A

New Product

Low Dropout (LDO) Linear Voltage Regulator

Purchase

Inquiry

Parametric search

ALL Application Note Other

Application Note

Basics of Low-Dropout (LDO) Regulator ICs[Jun,2020]

PDF: 1259KB

Application Note

Mechanism of LDO Oscillation and Reducing the Susceptibility to Oscillation[Mar,2020]

PDF: 1397KB

Application Note

Improving the Load Transient Response of LDOs[Jul,2019]

PDF: 1119KB

Application Note

Simple Guide to Improving Ripple Rejection Ratio of LDO Regulators[Jul,2019]

PDF: 1066KB

Description

Package Information

Absolute Maximum Ratings

Electrical Characteristics

Document

Inquiry

Related Links

Notes

Description

Application	Mobile equipment / IOT/Wearable equipment / Camera/Sensor power supply / RF power supply / Audio power supply
Feature	High ripple rejection ratio / Low quiescent current / Fast load transient response / Low output noise voltage / Small package
Output Type	Fixed Output
Overcurrent protection	Y
Thermal shutdown	Y
Auto-discharge	Y
Inrush current reduction	Y
RoHS Compatible Product(s) (#)	Available
Assembly bases	Japan

Package Information

Toshiba Package Name	DFN4C
Pins	4

Please refer to the link destination to check the detailed size.

Absolute Maximum Ratings

Characteristics	Symbol	Rating	Unit
Input Voltage	V _{IN}	6.0	V

Power Dissipation (mounted on glass-epoxy board(40mm×40mm))	P _D	420	mW
---	----------------	-----	----

Electrical Characteristics

Characteristics	Symbol	Condition	Value	Unit
Operating Output Current (Max)	I _{OUT}	-	300	mA
Operating Input Voltage *	V _{IN}	-	1.8 to 5.5	V
Output Voltage (Typ.)	V _{OUT}	-	2.8	V
Output Voltage Lineup	V _{OUT}	-	0.9 to 4.5	V
Output Voltage Accuracy (±) *	-	-	2.0	%
Quiescent Current (Typ.) *	I _{B(ON)}	I _{OUT} =0mA	7	μA
Stand-by Current (Typ.) *	I _{B(OFF)}	-	0.1	μA
Dropout Voltage (Typ.) *	V _{DO}	I _{OUT} =0.3A	130	mV
Ripple Rejection Ratio (Typ.) *	R.R.	f=1kHz	100	dB
Output Noise Voltage (Typ.) *	V _{NO}	-	5	μVrms
Operating Temperature	T _{opr}	-	-40 to 85	°C
Output Capacitance	C _{OUT}	-	≥1.0	μF

*: Representative value, Please refer to the datasheet for details.

Document

select all

If the checkbox is invisible, the corresponding document cannot be downloaded in batch.

Name	Date
Application Note ☐ Basics of Low-Dropout (LDO) Regulator ICs  PDF: 1259KB	Jun,2020
Application Note ☐ Mechanism of LDO Oscillation and Reducing the Susceptibility to Oscillation  PDF: 1397KB	Mar,2020
Application Note ☐ Improving the Load Transient Response of LDOs  PDF: 1119KB	Jul,2019
Application Note ☐ Simple Guide to Improving Ripple Rejection Ratio of LDO Regulators  PDF: 1066KB	Jul,2019
Application Note ☐ Power Efficiency Optimization and Application Circuits Using Dual-power-supply LDO Regulators  PDF: 915KB	Mar,2019
Application Note ☐ Thermal Design to Maximize the Performance of LDO Regulators  PDF: 914KB	Mar,2019
Application Note ☐ LDO Regulators Glossary  PDF: 449KB	Jan,2019
Catalog ☐ Power Management  PDF: 1179KB	May,2015

[select all](#)

If the checkbox is invisible, the corresponding document cannot be downloaded in batch.

Technical inquiry

**Contact us**[→ Contact us](#)**Frequently Asked Questions**[→ FAQs](#)

Related Links

[→ Part Naming Conventions](#)

Notes

The Part Number column shows representative part numbers only, which may not be available for sale in the precise form shown. Each Part Number constitutes a product family which may contain multiple associated product configurations.

(#) Under the RoHS Compatible Product(s) column, "Available" means at least one RoHS-Compatible product is available for sale in the corresponding product family. "None" means no RoHS Compatible product is available in that product family. For Toshiba's definitions of concepts related to the RoHS Directive and RoHS Compatibility, please click [here](#) .

The RoHS compatibility information provided herein is to the best of Toshiba's knowledge and belief accurate as of the date Toshiba entered the information into this database. Information is subject to change at any time without notice.

Please contact your Toshiba sales representative for detailed environmental information about each specific part number or product, such as RoHS compatibility or material content. Please use Toshiba products only in compliance with all applicable laws and regulations concerning the inclusion or use of controlled substances, including without limitation the RoHS Directive. **TOSHIBA ASSUMES NO LIABILITY FOR DAMAGES OR LOSSES OCCURRING AS A RESULT OF NONCOMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.**

Reliability data are provided for your reference only, please contact your Toshiba sales representative for detailed reliability information about each part number.

For product delivery, additional characters will be added to the part numbers shown on this website. For details, please ask your local distributor, or send an inquiry accessed from "Contact Us" on this website.

[back to list](#)[↗](#) A new window will open[→ Site Map](#)

Semiconductor Products

- [→ MOSFETs](#)
- [→ Optical Semiconductor Devices](#)
- [→ Power Management ICs](#)
- [→ Intelligent Power ICs](#)
- [→ Linear ICs](#)
- [→ Motor Driver ICs](#)
- [→ Diodes](#)
- [→ Bipolar Transistors / IGBTs](#)
- [→ High Power Devices](#)
- [→ Microcontrollers](#)

- [→ Image Recognition Processors Visconti™](#)
- [→ Automotive Devices](#)
- [→ ICs for Wireless Communication Equipment](#)
- [→ General Purpose Logic ICs](#)
- [→ Interface Bridge ICs for Mobile Peripheral Devices](#)
- [→ Radio-Frequency Devices](#)
- [→ Sensors](#)
- [→ Linear Image Sensors](#)

Storage Products

- [→ Data Center / Enterprise](#)
- [→ Internal / Specialty](#)
- [→ Consumer Storage](#)

→ Company

[PRIVACY POLICY](#) | [TERMS AND CONDITIONS](#) | [COOKIE SETTINGS](#) | [IMPRINT](#)

Copyright © 2020 TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION, All Rights Reserved.