

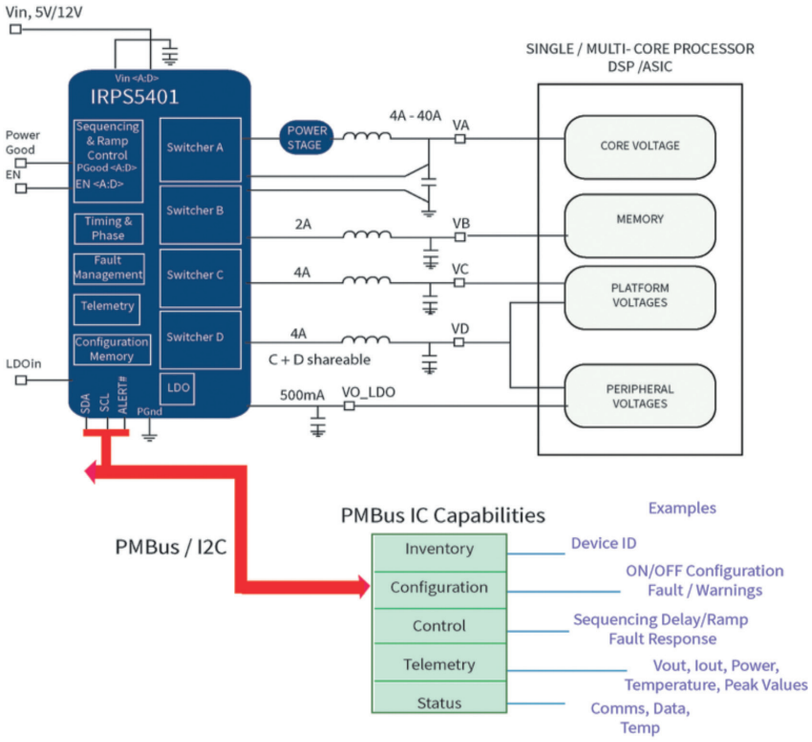
Product Brief

Multi-Output PMIC with Integrated Sequencer

IRPS5401

The IRPS5401 is an integrated power management IC ideal for tight board space requirements; for example, FPGAs, System On Chip ASICs and multi-core processors containing several voltages that require precision accuracy and voltage sequencing.

Typical PMIC Configuration



Key features

- Multi-output DC/DC with integrated FETs and Sequencer
- Replace many regulators with one PMIC
  - 4 switchers and 1 LDO in one package
  - Output A: 2 A (without), 50 A (with power stage)
  - Output B: 2 A
  - Outputs C,D: 4 A
  - Linear regulator: +/-0.5 A
- Full PMBus: Margining, Fault Management, Telemetry

DC-DC | Storage | Telecom | VRD/VRM

www.infineon.com

Multi-Output PMIC with Integrated Sequencer

IRPS5401

Scalable Power Options for Power Design Flexibility

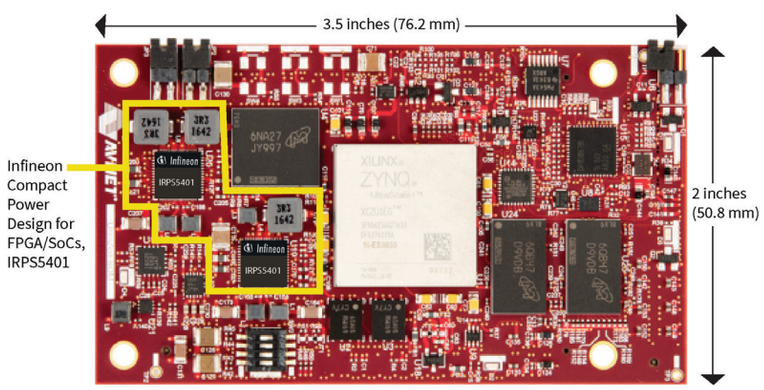
Example PMIC Configuration 1

			TDA21242 (<16A)	TDA21240 (<40A)
IRPS5401	TDA21242	Core Voltage, 0.72V	0.72V / 0.85V / 0.9V - 9A	0.72V / 0.85V / 0.9V - 30A
Ch A		System Voltage 3.3V	3.3V - 2A	3.3V - 2A
Ch B		Core Voltage, 0.85V	0.85V - 8A	0.85V - 8A
Ch C				
Ch D				
LDO		PS PLL supply	1.2V - 0.5A	1.2V - 0.5A

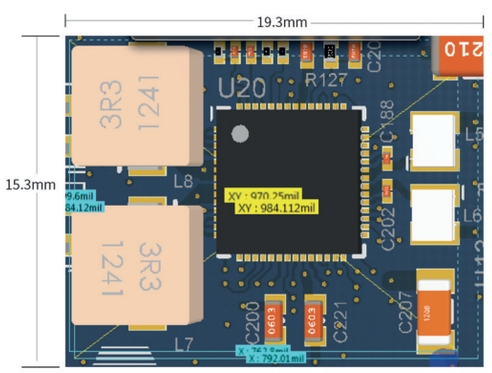
Example PMIC Configuration 2

IRPS5401	SERDES 0.9V	0.9V - 2A	0.9V - 2A
Ch A	DDR (VCCO_PSDDR4)	1.2V - 1.5A	1.2V - 1.5A
Ch B	Auxiliary supply	1.8V - 2A	1.8V - 2A
Ch C	SERDES / PLL 1.2V	1.2V - 2A - 4A	1.2V - 2A - 4A
Ch D	SERDES 0.85V	0.85V - 0.5A	0.85V - 0.5A
LDO			

Compact Power Solutions Includes Sequencer



Layout savings



Published by
Infineon Technologies AG
81726 Munich, Germany

© 2017 Infineon Technologies AG.
All Rights Reserved.

Date: 03 / 2017

Please note!
THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THEIR TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

Additional information
For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings
Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.