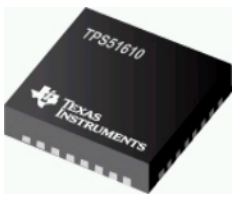

TPS51610 (ACTIVE)

No reviews yet. Add your review and give us feedback

Single Phase D-CAP+™Mode Step Down Controller for IMVP6+ CPU/GPU Vcore

Single Phase, D-CAP+(tm) Synchronous Buck Controller

Special note

This device is designed specifically to power IMVP Mobile Processors under a strict disclosure agreement with Intel. The end user must have a current CNDA Agreement in place with Intel. For more information please contact IMVP@list.ti.com.

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Description

The TPS51610 is a fully Intel-compliant single-phase synchronous buck controller with integrated gate drivers designed for use in low-power CPUs and Intel integrated Graphics solutions for IMVP-6+ generation notebook systems. Advanced control features such as D-CAP architecture and OSR overshoot reduction provide fast transient response, lowest output capacitance and high efficiency. The TPS51610 DAC

Features

- Minimum External Parts Count
- Full IMVP6+ Compliance, Including $\overline{\text{VRTT}}$ and Output Power Monitor
- Dual Mode DAC supports 5-Bit and 7-Bit VIDs
- 0.3-V to 1.5-V Output Range
- ±8 mV V Accuracy Over Line/Load/Temp

View more

Parametrics

Compare all products in V-Core Regulator

	TPS51610	TPS51611	TPS51620	TPS51621
Vin (Min) (V)	3	3	3	3
Vin (Max) (V)	28	28	28	28
Vout (Min) (V)	0.3	0.3	0.3	0.3
Vout (Max) (V)	1.5	1.5	1.5	1.5
Iout (Max) (A)	60	60	60	60
Switching Frequency (Max) (kHz)	500	500	500	500
Soft Start	Adjustable	Adjustable	Adjustable	Adjustable
Control Mode	D-CAP+	D-CAP+	D-CAP+	D-CAP+
Regulated Outputs (#)	1	1	1	1
Topology	Buck	Buck	Buck	Buck
Platform	IMVP6+	IMVP6.5	IMVP6+	IMVP6.5
Special Features	Power Good	Power Good	Power Good	Power Good
Operating Temperature Range (C)	-10 to 105 -40 to 105	-10 to 105	-10 to 100	-10 to 105
Pin/Package	32VQFN	32VQFN	40VQFN	40VQFN
Approx. Price (US$)	1.25 | 1ku	2.31 | 100u	2.00 | 1ku	1.65 | 1ku
	Sample & Buy	Sample & Buy	Sample & Buy	Sample & Buy

Related end equipment

- Embedded PC
- Netbook
- Notebook PC
- Power Solutions for Intel® Atom™ IMVP6+ Platform

Customer Reviews BETA

No reviews yet. Add your review and give us feedback

Featured tools and software

- TPS51610, TPS51620-1 PSpice Model (Simulation Models)
- Single-Phase, D-CAP+™ Synchronous Buck Controller for Intel™ Atom™ Processors (Evaluation Modules & Boards)
- Sync Buck for Intel IMVP6+ Atom TIDesigns
- Intel® Atom™ E6xx (Tunnel Creek) CPU/GPU core reference design for Embedded PCs TIDesigns
- View All tools and software for TPS51610

TI is a global semiconductor design and manufacturing company. Innovate with 100,000+ analog ICs and embedded processors, along with software, tools and the industry's largest sales/support staff.

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