

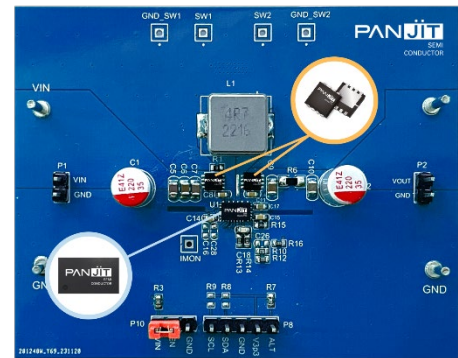
36 V/100 W Buck-Boost Regulators

Integrated Low-Side MOSFET - Total Solution for Thermal, SMT, and PCB

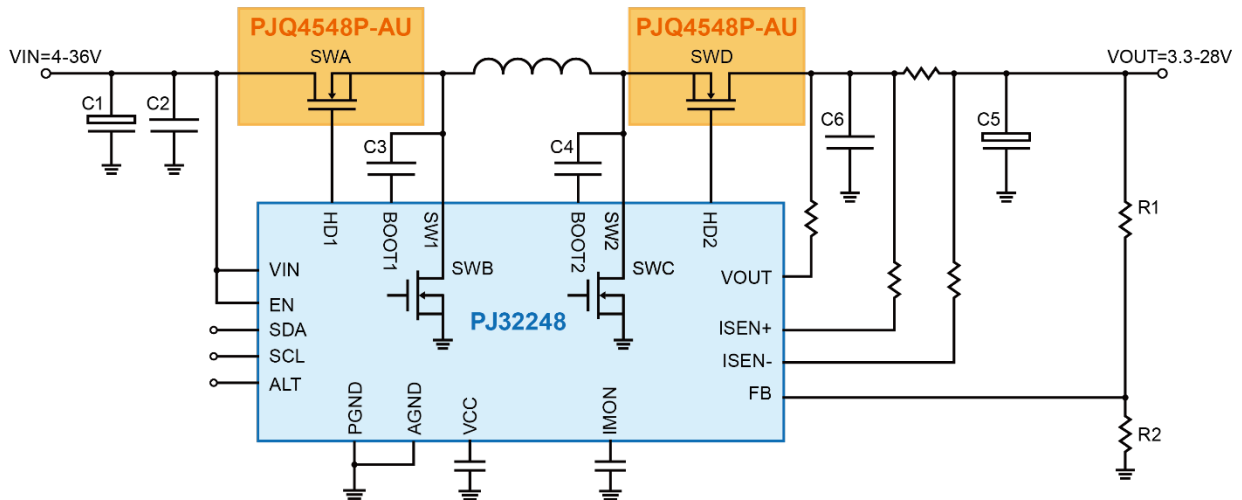


► Features

- Low-side MOSFET integrated with gate driver for high-side power switches
- Programmable Power Supply (PPS) support for USB power delivery
- Integrated IMON pin to indicate output current information
- Support 36 V / up to 100 W PD power
- Available Package : VQFN3x5-20



► Block Diagram



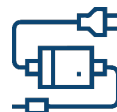
► Applications



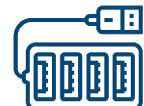
Digital TV



Monitor



Car Charger

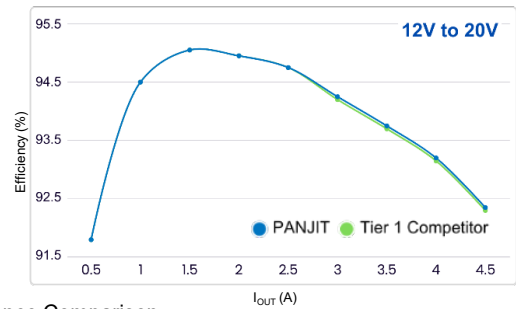
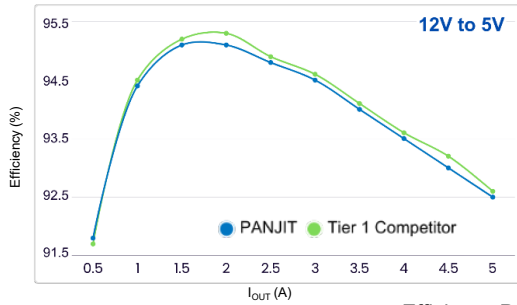


USB PD Hub / Docking



▶ Thermal Performance Comparison

Test Case	12 V to 20 V		12 V to 28 V		20 V to 28 V	
	@3 A	@5 A	@3 A	@5 A	@3 A	@5 A
Unit	°C	°C	°C	-	°C	°C
PJ32248	58.6	128	116	TSD	74.6	99.2
Tier 1 Competitor	59	131	113	TSD	74	97.5



Efficiency Performance Comparison

PANJIT Total IC Solutions

* Under Development

Category	V _{CC} V	I _{OUT} A	Released	Q3.2024	Package	
						Power Management IC
	Boost Regulators	5.5	0.75 1		PJ30072 PJ30099*	SOT23-6 DFN2x2-6 / SOT23-6
	Buck-Boost Regulators	36 60	5		PJ32247 PJ32248* PJ35175*	VQFN3x3-20 VQFN3x5-20 QFN4x5-28
	Low Noise LDOs	5.5	0.3 0.5 3		PJ20030 PJ20050 PJ20301	DFN1x1-4 / SOT23-5 DFN2x2-6 / DFN1.2x1.2-6 DFN3x3-10L / PSOP-8P
	Low I_q LDOs	5.5	0.15 0.3		PJ20705 PJ20703*	DFN1x1-4 / SOT23-5 DFN1x1-4 / SOT23-5
	High PSRR LDOs	5.5	0.45 0.3		PJ20950 PJ20938*	DFN1x1-4 / SOT23-5 / WLCSP-4 DFN1x1-4 / SOT23-5
	Load Switches	5.5	2.57 6 6+6		PJ57026 PJ52916 PJ52926	DFN2x2-6 / SOT23-6 DFN2x2-8 DFN3x2-14
Signal Chain IC	Category	V_{CC} V	Resolution Bit.	Released	Q3.2024	Package
	Temperature Sensors	5.5	11 12			MSOP-8P SOT23-5 SOP-8P / MSOP-8P PJ85411* MSOP-8P / DFN3x3-8
	Category	V_{CM} V	Gain Error %	Released	Q3.2024	Package
	Current Sense Amplifiers	36	1			PJ75233 PJ75210* DFN3x3-10 / MSOP-10P SC70-6
	Category	V_{CM} V	A_{VD} V/mV	Released	Q3.2024	Package
	Operational Amplifiers	18 32 36 32	500 100 100 200			PJ76007* PJ76324 PJ76358 PJ76393 PJ76339 SOP-8P SOP-14P / TSSOP-14P SOP-8P / TSSOP-8P SOP-8P SOP-14P / TSSOP-14P