

GE Critical Power

Integrated Power Solutions for High Performance SOCs



GE power converters provide small, efficient, and reliable power converters for high performance SOCs. Our high-density power supplies and POLs provide a cost-effective solution to power silicon that includes Core and I/O requirements ranging from 0.45 to 5.5V.

Our standards-based, modular solutions deliver a lower total system cost. GE POLs provide three times better transient response, have a smaller footprint; and are easier to implement than discrete solutions.

- Accelerate time to market
- Reduce risk of design errors
- Scalable offering from 2-225 Amps (5 x 50A) for POLS and 150W-2500W for AC/DC Power Supplies
- Pre-characterized electrical and thermal performance
- International safety approvals
- Leading power density

Full Range of high efficiency, cost effective AC/DC Power Supplies

Model	Power Rating	Output Voltage	Dimensions (LXWXH)	Efficiency Rating
CLP0112FP	150W	12V	4" x 2" x 1.4"	Gold
CLP0212FP	200W	12V	4" x 2" x 1.4"	Gold
CAR0512FP	500W	12V	10.2" x 3.38" x 1.61"	Gold
CAR0812FP	850W	12V	8.73" x 3.38" x 1.61"	Gold
CAR1612FP	1600W	12V	12.45" x 4" x 1.61"	Platinum
CAR2012FP	2000W	12V	12.89" x 4" x 1.61"	Platinum
CAR2512FP	2500W	12V	15.82" x 4" x 1.61"	Platinum

Leading Density at Low Cost

GE Tunable Loop™ products ensure low cost implementation of board mounted power in standards-based DOSA footprints.

Product Family	Output Models	Communication	Input Voltage	Output Voltage	Output Current	Efficiency	Dimensions
PicoDlynx™	PDT003	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.5V	3A	94%	12.2 x 12.2 x 6.25 mm
PicoDlynx™	PDT006	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.5V	6A	94%	12.2 x 12.2 x 7.25 mm
SlimLynx™	PNDT006	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.5V	6A	95%	12.2 x 12.2 x 2.8 mm
SlimLynx™	UNDT/ULDT006	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.50V	6A	95%	20.3 x 11.4 x 3 mm
Dual MicroDlynx™	UDXS0606	Digital PMBus™ (Vout, Iout, Temp. data)	4.5-14.4V	0.51-5.50V	2 x 6A	97%	20.3 x 11.4 x 8.5 mm
PicoDlynx™	PDT012	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.50V	12A	96%	12.2 x 12.2 x 8.5 mm
Dual MicroDlynx™	UDXS1212	Digital PMBus™ (Vout, Iout, Temp. data)	4.5-14.4V	0.51-5.50V	2 x 12A	97%	20.3 x 11.4 x 8.5 mm
SlimLynx™	PNDT012	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.50V	12A	95%	12.2 x 12.2 x 2.8 mm
SlimLynx™	UNDT/ULDT012	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.50V	12A	95%	20.3 x 11.4 x 3 mm
MicroDlynx™	UDT020	Digital PMBus™ (Vin, Vout, Iout data)	3.0-14.4V	0.45-5.50V	20A	96%	20.3 x 11.4 x 8.5 mm
MegaDlynx™	MDT040	Digital PMBus™ (Vin, Vout, Iout data)	4.5-14.4V	0.45 to 2.0V	40A	94%	33 x 13.5 x 10.9 mm
GigaDlynx™	GDT080	Digital PMBus™ (Vin, Vout, Iout, Temp. data)	4.5-14.4V	0.45 to 2.0V	80A	93%	33 x 22.9 x 12.7 mm
PicoTlynx™	APXS002	Analog	3.0-14.0V	0.60-5.50V	2A	96%	12.2 x 12.2 x 6.25 mm
PicoTlynx™	PNVX002	Analog	3.0-14V	0.6-5.5V	2A	97%	12.2 x 12.2 x 4.5 mm
PicoDlynx™	PVX003	Analog	3.0-14.4V	0.6-5.5V	3A	94%	12.2 x 12.2 x 6.25 mm
PicoDlynx™	PVX006	Analog	3.0-14.4V	0.6-5.5V	6A	94%	12.2 x 12.2 x 7.25 mm
SlimLynx™	PNVT006	Analog	3.0-14.4V	0.6-5.50V	6A	95%	12.2 x 12.2 x 2.8 mm
SlimLynx™	UNVT/ULVT006	Analog	3.0-14.4V	0.6-5.50V	6A	95%	20.3 x 11.4 x 3 mm
Dual MicroDlynx™	UVXS0606	Analog	4.5-14.4V	0.51-5.50V	2 x 6A	97%	20.3 x 11.4 x 8.5 mm
PicoDlynx™	PVX012	Analog	3.0-14.4V	0.60-5.5V	12A	96%	12.2 x 12.2 x 8.5 mm
Dual MicroDlynx™	UVXS1212	Analog	4.5-14.4V	0.51-5.50V	2 x 12A	97%	20.3 x 11.4 x 8.5 mm
SlimLynx™	PNVT012	Analog	3.0-14.4V	0.6-5.50V	12A	95%	12.2 x 12.2 x 2.8 mm
SlimLynx™	UNVT012/ULVT012	Analog	3.0-14.4V	0.6-5.50V	12A	95%	20.3 x 11.4 x 3 mm
MicroDlynx™	UVT020	Analog	3.0-14.4V	0.60-5.5V	20A	96%	20.3 x 11.4 x 8.5 mm
MegaTlynx™	APTS030	Analog	6.0 - 14.0V	0.8V - 2.75V	30A	96%	33 x 13.5 x 10 mm
MegaDlynx™	MVT040	Analog	4.5-14.4V	0.6 - 2.0V	40A	94%	33 x 13.5 x 10.9 mm
GigaTlynx™	APTS050	Analog	4.5-14.0V	0.60-2.0V	50A	95%	33 x 22.9 x 10 mm



Options for Cavium Designs

OCTEON® and ThunderX™ are registered trademarks of the Cavium Inc. Always refer to manufacturer's specification for correct and up-to-date power information.

OCTEON II (CN6XXX) - Core, PLL and I/O Voltage: Module Output 0.85V to 3.3V

Input V	0 to 2 Amp	0 to 3 Amp	3 to 6 Amp	6/6 to 12/12 Amp	12 to 20 Amp	20 to 30 Amps	30 to 40 Amps (2Vo max)	40 to 80A(2Vo max)	80A - 180A/225A (2Vo max)
3-14/14.4V	APXS002A0X-SRZ	PDT/PVX003A0X3-SRZ	PDT/PVX006A0X3-SRZ	PDT/PVX012A0X3-SRZ UL/UNDT006, UL/UNVT006 PNDT/PNVT006, PNDT/PNVT012	UDT/UVT020A0X3-SRZ UL/UNDT012, UL/UNVT012		MDT/MVT040A0X3-SRZ		MDT/MVT040A0X3-SRZ*1
4.5-14/14.4V				UD/UVXS0606#	UD/UVXS1212#			APTS050A0X3-SRPHZ / GDT080A0X3-SRHZ	APTS050A0X3-SRPHZ*1
6-14V									APTS030A0X3-SRPHZ

OCTEON III (CN7XXX) - Core, PLL and I/O Voltage: Module Output 0.85V to 3.3V

Input V	0 to 2 Amp	0 to 3 Amp	3 to 6 Amp	6/6 to 12/12 Amp	12 to 20 Amp	20 to 30 Amps	30 to 40 Amps (2Vo max)	40 to 80A(2Vo max)	80A - 180A/225A (2Vo max)
3-14/14.4V	APXS002A0X-SRZ	PDT/PVX003A0X3-SRZ	PDT/PVX006A0X3-SRZ	PDT/PVX012A0X3-SRZ UL/UNDT006, UL/UNVT006 PNDT/PNVT006, PNDT/PNVT012	UDT/UVT020A0X3-SRZ UL/UNDT012, UL/UNVT012		MDT/MVT040A0X3-SRZ		MDT/MVT040A0X3-SRZ*1
4.5-14/14.4V				UD/UVXS0606#	UD/UVXS1212#			APTS050A0X3-SRPHZ / GDT080A0X3-SRHZ	APTS050A0X3-SRPHZ*1
6-14V									APTS030A0X3-SRPHZ

ThunderX (CN8XXX) - Core and I/O Voltage: Module Output 0.8V to 3.3V

Input V	0 to 2 Amp	0 to 3 Amp	3 to 6 Amp	6/6 to 12/12 Amp	12 to 20 Amp	20 to 30 Amps	30 to 40 Amps (2Vo max)	40 to 80A (2Vo max)	80A - 180A/225A (2Vo max)
3-14/14.4V	APXS002A0X-SRZ	PDT/PVXDD3A0X3-SRZ	PDT/PVXDD6A0X3-SRZ	PDT/PVXD12A0X3-SRZ UL/UNDT006, UL/UNVT006 PNDT/PNVT006, PNDT/PNVT012	UDT/UVTD2DAD0X3-SRZ UL/UNDT012, UL/UNVT012 UL/UNDT012, UL/UNVT012		MDT/MVT040A0X3-SRZ		MDT/MVT040A0X3-SRZ*1
4.5-14/14.4V				UD/UVXS0606#	UD/UVXS1212#			APTS050A0X3-SRPHZ / GDT080A0X3-SRHZ	APTS050A0X3-SRPHZ*1
6-14V									APTS030A0X3-SRPHZ

Notes: # Dual Output modules

*1 Output current above 80A can be achieved by paralleling. Five (max) of the 40A can be paralleled at 90% rating to achieve an output of up to 180A. Five (max) of the 50A can be paralleled at 90% capacity to achieve an output of up to 225A

All parts are non-isolated buck regulators. As such, Vin must exceed programmed Vout . See individual specifications for details.

Digital Power Insight (DPI)™



Set of Tools to interact with GE PMBus™ enabled DC-DC power modules

- Easy to use software running on Windows PC
- Use with GE USB-to-I²C translator to communicate with modules
- Multiple tools utilizing either graphical interfaces or command line instructions
- Rich set of functions, including setup and configuration options to control and read back data

The Digital Power Insight (DPI) software suite along with GE's latest Digital AC-DC and DC-DC power supplies, Digital Bus Converters and Point-of-Load (POL) modules allows customers to communicate with the end-use equipment via the PMBus interface without writing any software. With a set of four tools (command line interface based DPI-CLI; a simple, fixed-format graphical user interface DPI-GUI for modules and Bus Converters and CPGUI for the CP family products and the full-featured, multi-window ProGUI), the user has a range of user interfaces to match their development and testing needs. The table below provides a quick summary of the features and capabilities of the four tools.



Features	DPI-CLI	CPGUI	DPI-GUI	DPI-ProGUI
Find all modules connected to I ² C bus	•	Up to 8	Up to 6	•
Query and adjust individual module parameters	•	•	•	•
Query and adjust small group of modules (≤ 6)	•	•	•	•
Query and adjust large group of modules (up to 64)	•			•
Continuous polling of modules to collect and display data	•	•	•	•
Store recorded data in a file	•	•		•
Plot Waveforms of module data				•
Creating and Storage of Module Configuration		•	•	•
Scripting Capability	•			•

The DPI Software Tool Set is distributed as a zip file that can be downloaded from a link on the GE website. <http://www.geindustrial.com/tools-and-calculators>



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