

DLynx*

Industry's First DOSA-Based Digital Point-Of-Load (POL) DC-DC Converters

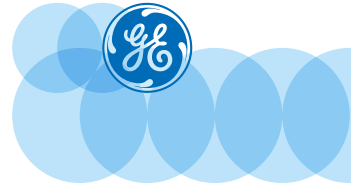


The DLynx* family of standards-based DOSA footprints and analog/digital compatibility with existing circuit board designs shrinks the size, lowers the cost, and improves the performance of DC-DC converter modules. Delivering industry leading current density in a flexible nested footprint, a single circuit board layout can accommodate 3A to 40A power requirements in Pico (12.2×12.2mm), Micro (20.3×11.4mm) and Mega (33×13.5mm) formats. The 80A modules in a Giga (33×22.9mm) format supply even more current for the most demanding applications.

Some of the features of the DLynx are:

- High efficiency operation up to 96% with advanced thermal management
- Wide input (3-14.4Vdc) and wide output range (0.45-5.5Vdc)
- Tight controller voltage reference
- Adaptive voltage scaling (AVS) leverages silicon performance to reduce power consumption through tight digital control
- Standards-based digital communication (DOSA, PMBus*)
- Cost efficient open frame design
- Dual offering - both digital and analog versions
- Tunable Loop*
- EZ-Sequence*

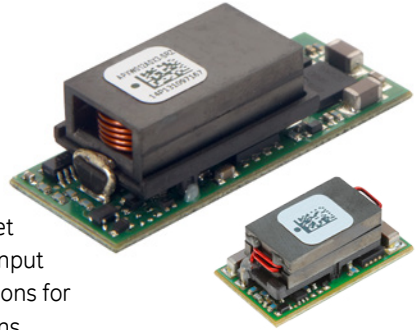
PRODUCT FAMILY	MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	ISOLATION/ COMMUNICATION	EFFICIENCY
PicoDLynx*	PNVX002	3.0 - 14.0V	0.60 - 5.5V	2A	Analog	94%
	PDT003	3.0 - 14.4V	0.45 - 5.5V	3A	Digital	94%
	PVX003	3.0 - 14.4V	0.60 - 5.5V	3A	Analog	92%
	PDT006	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	94%
	PVX006	3.0 - 14.4V	0.60 - 5.5V	6A	Analog	94%
	PDT012	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	PVX012	3.0 - 14.4V	0.60 - 5.5V	12A	Analog	95%
MicroDLynx*	UDT020	3.0 - 14.4V	0.45 - 5.5V	20A	Digital	96%
	UVT020	3.0 - 14.4V	0.60 - 5.5V	20A	Analog	96%
MegaDLynx*	MDT040	4.5 - 14.4V	0.45 - 2.0V	40A	Digital	91.5%
	MVT040	4.5 - 14.4V	0.60 - 2.0V	40A	Analog	91.5%
GigaDLynx*	GDT080	4.5 - 14.0V	0.60 - 2.0V	80A	Digital	93%
PicoTLynx*	APXS002	3.0 - 14V	0.60 - 5.50V	2A	Analog	96%
	APXK004	8.0 - 16V	0.60 - 8.00V	4A	Analog	96%
MegaTLynx*	APTS030	6.0 - 14V	0.80 - 3.63V	30A	Analog	96%
SlimLynx* (Non-Encapsulated)	PNDT012 (Pico)	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	PNVT012 (Pico)	3.0 - 14.4V	0.6 - 5.5V	12A	Analog	96%
	PNDT006 (Pico)	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	95%
	PNVT006 (Pico)	3.0 - 14.4V	0.6 - 5.5V	6A	Analog	95%
	UNDT012 (Micro)	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	UNVT012 (Micro)	3.0 - 14.4V	0.6 - 5.5V	12A	Analog	96%
	UNDT006 (Micro)	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	96%
	UNVT006 (Micro)	3.0 - 14.4V	0.6 - 5.5V	6A	Analog	96%
SlimLynx* (Encapsulated)	ULDT012 (Micro)	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	ULVT012 (Micro)	3.0 - 14.4V	0.6 - 5.5V	12A	Analog	96%
	ULDT006 (Micro)	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	96%
	ULVT006 (Micro)	3.0 - 14.4V	0.6 - 5.5V	6A	Analog	96%
Dual DLynx*	UDXS1212	4.5 - 14.4V	0.51 - 5.5V	2x12A	Digital	95%
	UVXS1212	4.5 - 14.4V	0.60 - 2.0V	2x12A	Analog	95%
	UDXS0606	4.5 - 14.4V	0.51 - 5.5V	2x6A	Digital	95%
	UVXS0606	4.5 - 14.4V	0.60 - 2.0V	2x6A	Analog	95%



ProLynx* Series

Wide Input Range and Ruggedized

The ProLynx* family of non-isolated, DOSA-standard DC-DC point of load converters accelerates speed to market by reducing design cycle for applications requiring a wide input voltage tolerance. New features make ProLynx* ideal solutions for industrial, medical, and wireless communication applications.



Some of the features of the ProLynx are:

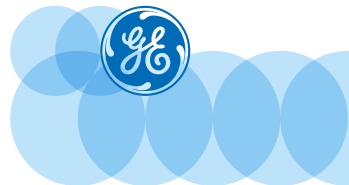
- High efficiency operation up to 97%
- Ultra wide input voltage range of 9-36Vdc
- Extended output voltage range 3-18Vdc
- Three products available, 3A, 5A and 12A
- Negative output voltage can be created from a positive input voltage by changing the input connection
- Variable output current limit
- Superior thermal performance
- Extended shock and vibration
- Tunable Loop* optimized dynamic response
- Remote enable
- Overcurrent / overtemperature protection
- AutoLimit* feature reduces need to oversize components

PRODUCT FAMILY	MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	ISOLATION/ COMMUNICATION	EFFICIENCY
ProLynx*	APXW003	9.0 - 36.0V	3.0 - 18.0V	3A	Analog	97%
	APXW005	9.0 - 36.0V	3.0 - 18.0V	5A	Analog	96%
	APXW012	9.0 - 36.0V	3.0 - 18.0V	12A	Analog	97%
PicoDLynx*	PNVX002	3.0 - 14.0V	0.60 - 5.5V	2A	Analog	94%
	PDT003	3.0 - 14.4V	0.45 - 5.5V	3A	Digital	94%
	PVX003	3.0 - 14.4V	0.60 - 5.5V	3A	Analog	92%
	PDT006	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	94%
	PVX006	3.0 - 14.4V	0.60 - 5.5V	6A	Analog	94%
	PDT012	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	PVX012	3.0 - 14.4V	0.60 - 5.5V	12A	Analog	95%
MicroDLynx*	UDT020	3.0 - 14.4V	0.45 - 5.5V	20A	Digital	96%
	UVT020	3.0 - 14.4V	0.60 - 5.5V	20A	Analog	96%
MegaDLynx*	MDT040	4.5 - 14.4V	0.45 - 2.0V	40A	Digital	91.5%
	MVT040	4.5 - 14.4V	0.60 - 2.0V	40A	Analog	91.5%
GigaDLynx*	GDT080	4.5 - 14.0V	0.60 - 2.0V	80A	Digital	93%
PicoTLynx*	APXS002	3.0 - 14V	0.60 - 5.5V	2A	Analog	96%
	APXK004	8.0 - 16V	0.60 - 8.0V	4A	Analog	96%
MegaTLynx*	APTS030	6.0 - 14V	0.80 - 3.63V	30A	Analog	96%
Hammerhead* 1x1 Brick	SHHD000A3CL	18 - 75V	+15V, -15V	0.3A	2250Vdc	84%
	SHHD001A3B	18 - 75V	12V	1.3A	2250Vdc	88%
	SHHD003A0A	18 - 75V	5V	3A	2250Vdc	87%
	SHHD005A0F	18 - 75V	3.3V	5A	2250Vdc	88%
Hammerhead* 1/16 Brick	KHHD002A5B	18 - 75V	12V	2.5A	2250Vdc	90%
	KHHD004A2B	18 - 75V	12V	4.2A	2250Vdc	90%
	KHHD004A2S8R0	18 - 75V	8V	4.2A	2250Vdc	90%
	KHHD006A0A	18 - 75V	5V	6A	2250Vdc	90%
	KHHD010A0A	18 - 75V	5V	10A	2250Vdc	91%
	KHHD010A0F	18 - 75V	3.3V	10A	2250Vdc	90%
Hammerhead* 1/8th Brick	KHHD015A0F	18 - 75V	3.3V	15A	2250Vdc	91%
	EHHD006A0B	18 - 75V	12V	6A	2250Vdc	91%
	EHHD010A0B	18 - 75V	12V	10A	2250Vdc	93%
	EHHD015A0A	18 - 75V	5V	15A	2250Vdc	90%
	EHHD020A0F	18 - 75V	3.3V	20A	2250Vdc	92%
	EHHD024A0A	18 - 75V	5V	24A	2250Vdc	91%
Hammerhead* 1/4th Brick	EHHD036A0F	18 - 75V	3.3V	36A	2250Vdc	90%
	QHHD019A0B	18 - 75V	12V	19A	2250Vdc	93%
SlimLynx* (Non-Encapsulated)	PNDT012 (Pico)	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
	PNVT012 (Pico)	3.0 - 14.4V	0.6 - 5.5V	12A	Analog	96%
	PNDT006 (Pico)	3.0 - 14.4V	0.45 - 5.5V	6A	Digital	95%
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	UNDT012 (Micro)	3.0 - 14.4V	0.45 - 5.5V	12A	Digital	96%
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SlimLynx*

Low Profile Digital Solutions

SlimLynx* allows engineers to provide digital “on board” power where space, height and airflow are extremely limited. Principal applications include bottom side board placement, mezzanine structures, vertical daughter boards and ultra-slim applications. It also increases overall board utilization by accommodating previously unusable areas allowing greater overall computational power and functionality. Its rectangular form factor allows a more dynamic use of board space compared to traditional square solutions.



Some of the features of the SlimLynx are:

- Ultra low height design (3mm) for very dense power applications
- Two output current options available: 12A and 6A
- Available in two small DOSA approved footprints; Pico (12.2mm x 12.2mm) and Micro (20.32mm x 11.43mm)
- Wide Input voltage range (3Vdc-14.4Vdc)
- Output voltage programmable from 0.6Vdc to 5.5Vdc via external resistor. Digitally adjustable down to 0.45Vdc
- Digital interface through the PMBus* # protocol
- Tunable Loop* to optimize dynamic output voltage response
- Remote On/Off
- Fixed switching frequency with capability of external synchronization
- Analog and digital options available
- Micro package available in encapsulated and non-encapsulated versions

Tunable Loop* products ensure high performance, and small size low cost implementation of board mounted power in standards-based DOSA footprints.



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	UVXS1212	4.5 - 14.4V	0.60 - 2.0V	2x12A	Analog	95%
	UDXS0606	4.5 - 14.4V	0.51 - 5.5V	2x6A	Digital	95%
	UVXS0606	4.5 - 14.4V	0.60 - 2.0V	2x6A	Analog	95%
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