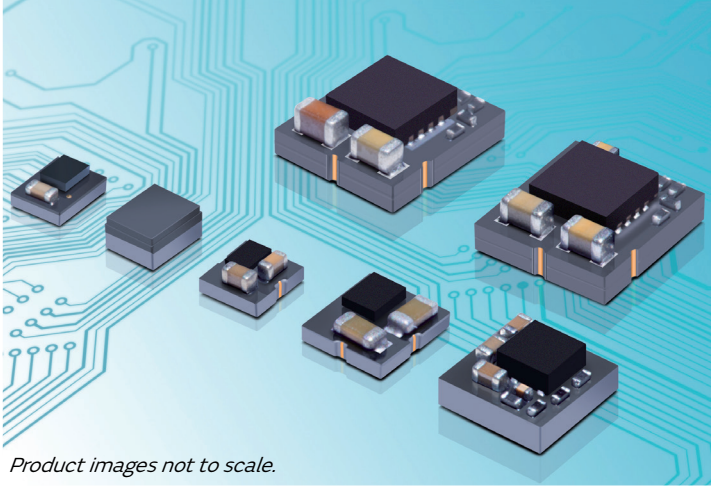


# Product Brief

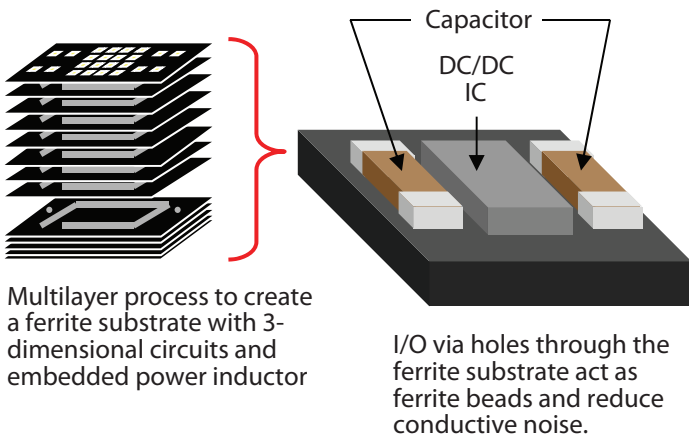
# LXDC Series

## $\mu$ DCDC Converters



Product images not to scale.

### Structure



Multilayer process to create a ferrite substrate with 3-dimensional circuits and embedded power inductor

I/O via holes through the ferrite substrate act as ferrite beads and reduce conductive noise.

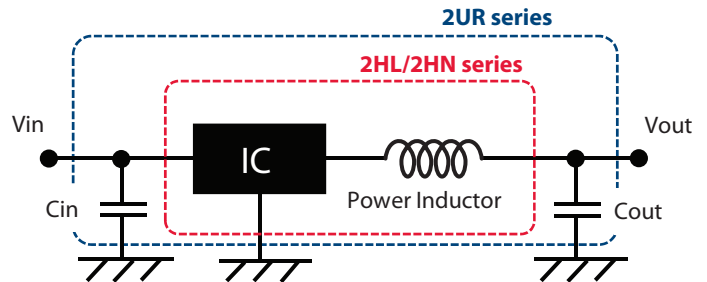
### Features

- Low EMI noise and small footprint due to **inductor-embedded ferrite substrate**
- High efficiency using synchronous rectifier technology and PFM/PWM auto-select function (forced mode available on some models)
- Input voltage range: 2.3–5.5V & 4–14V (55F series)
- Load currents available are 600mA, 1A, 1.5A and 3A
- Fixed output voltage & adjustable voltage type (see product line-up table on page two)
- Switching frequency: 3MHz to 6MHz
- Operating temperature range: -40 to +85°C (105°C for 2XQ)

### Applications

- Any device currently using discrete DC/DC circuits where downsizing and space savings are required
- Cellular phones, PDAs, mobile internet devices
- Digital cameras, ebooks, tablets, W-LAN, BT
- Portable game consoles, music players, etc.
- Base station, 12V AC/DC adaptor input devices

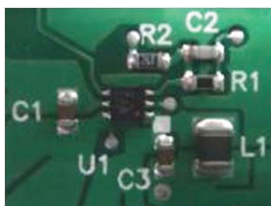
### Application Circuit



Note: See page two for circuits specific to each series.

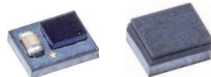
### Downsizing Advantage

Discrete Solution



Footprint  
35–60mm<sup>2</sup>

2HL or 2HN  
Series (0.6A)



2HL 2HN

10mm<sup>2</sup>  
(including two  
external capacitors)

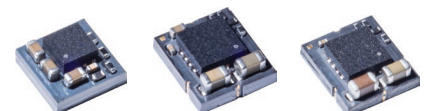
2UR Series (0.6A)  
2XQ Series (1.5A)



2UR 2XQ

6–10mm<sup>2</sup>

44A Series (0.7A) -Boost  
55K Series (3A)  
55F Series (14V input, 1.5A)



44A 55K 55F

16–28mm<sup>2</sup>

# LXDC Series

## μDCDC Converters

### Product Line-Up

Type	Load Current	Series	W x L x T (mm)	Application Circuit	Part Number	Input Voltage (V)	Output Voltage (V)	Max. Iout (mA)	Switch. Freq.	Pkg. (pcs/reel)				
Buck	≤0.6A	2HL	2.5×2.0×1.1		LXDC2HL10A-080	2.3-5.5	1.0	600	3MHz	3000				
					LXDC2HL12A-050		1.2							
					LXDC2HL13A-082		1.3							
					LXDC2HL1DA-087		2.35-5.5				1.35			
					LXDC2HL15A-051		2.5-5.5				1.5			
					LXDC2HL18A-052		2.8-5.5				1.8			
		2HN	2.5×2.0×1.2		LXDC2HL25A-053	3.5-5.5	2.5	500						
					LXDC2HL28A-243	2.8-5.5	2.8	450						
					LXDC2HL30A-054	3.7-5.5	3.0	400						
					LXDC2HL33A-055	3.8-5.5	3.3	300						
					LXDC2HN10A-132	2.3-5.5	1.0	600	3MHz	3000				
					LXDC2HN12A-099		1.2							
	LXDC2HN13A-236	1.3												
	LXDC2HN1DA-133	2.35-5.5	1.35											
	LXDC2HN15A-126	2.5-5.5	1.5											
	LXDC2HN18A-097	2.8-5.5	1.8											
	2UR	2.5×2.3×1.2		LXDC2HN25A-134	3.5-5.5	2.5	500							
				LXDC2HN28A-235	2.8-5.5	2.8	450							
LXDC2HN30A-135				3.7-5.5	3.0	400								
LXDC2HN33A-136				3.8-5.5	3.3	300								
LXDC2UR12A-118				2.3-5.5	1.2	600	6MHz	3000						
LXDC2UR15A-119				2.5-5.5	1.5									
LXDC2UR18A-120	2.8-5.5	1.8												
LXDC2UR30A-143	3.7-5.5	3.0												
LXDC2UR33A-122	3.8-5.5	3.3												
Buck/ Boost	≤1.5A	2XQ	2.6×2.8×1.14		LXDC2UR12A-118				2.7-5.5	1.0	1.5A	3MHz	3000	
					LXDC2XQ11A-298	1.2								
					LXDC2XQ12A-252	1.35								
					LXDC2XQ1DA-299	1.5								
					LXDC2XQ18A-253	1.8								
					LXDC2XQ25A-300	2.5								
	LXDC2XQ33A-254	3.0	800mA											
	55K	≤3A	5.7×5.0×2.1		LXDC2XQ10A-251	2.7-5.5	1.0	0.8-3.6 Set by trim resistor	3000	3MHz	1000			
					LXDC2XQ11A-298		1.2							
					LXDC2XQ12A-252		1.35							
					LXDC2XQ1DA-299		1.5							
					LXDC2XQ18A-253		1.8							
LXDC2XQ25A-300					2.5									
55F	≤1.5A	5.7×5.0×2.1		LXDC2XQ33A-122	4.0-14.0	3.0	0.8-5.3 Set by trim resistor	1500	2.5MHz	1000				
				LXDC55KAAA-205		2.7-5.5					0.8-3.6 Set by trim resistor	3000	3MHz	1000
				LXDC55FAAA-203		4.0-14.0					0.8-5.3 Set by trim resistor	1500	2.5MHz	1000
				LXDC3ECAAD-202		2.5-5.5					3.2-3.4V Set at factory	≤1A Buck Mode/ ≤800mA Boost Mode	6MHz	1000
				LXDC44AAAC-169		2.7-5.5					5.0	700	3.3MHz	1000

Contents subject to change without notice. Product images not to scale.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Murata:

[LXDC2UR15A-119](#) [LXDC2UR30A-143](#) [LXDC2UR12A-118](#) [LXDC2UR18A-120](#) [LXDC2UR33A-122](#) [LXDC55FAAA-203](#) [LXDC2XQ12A-252](#) [LXDC2XQ10A-251](#) [LXDC2XQ25A-300](#) [LXDC2XQ11A-298](#) [LXDC2XQ1DA-299](#) [LXDC2XQ18A-253](#) [LXDC2XQ33A-254](#) [LXDC44AAAC-169](#) [LXDC2HN30A-135](#) [LXDC2HN28A-235](#) [LXDC2HN12A-099](#) [LXDC2HN18A-097](#) [LXDC2HN10A-132](#) [LXDC2HN25A-134](#) [LXDC2HN15A-126](#) [LXDC2HN33A-136](#) [LXDC2HN13A-236](#) [LXDC2HN1DA-133](#) [LXDC2XQ15A-277](#) [LXDC2XQ13A-343](#)