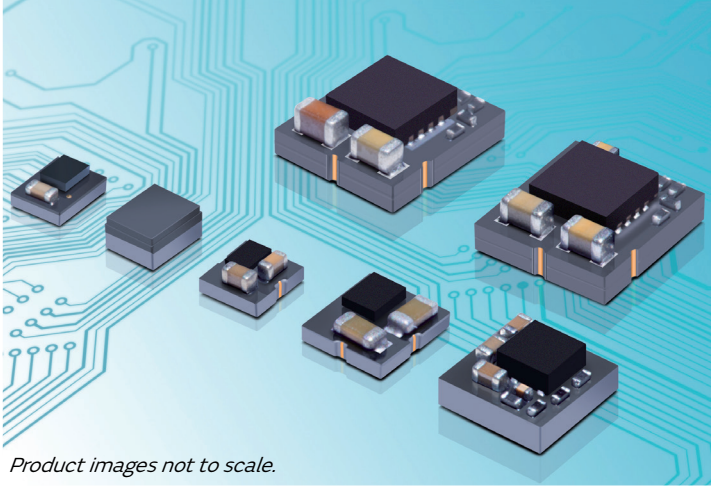


# Product Brief

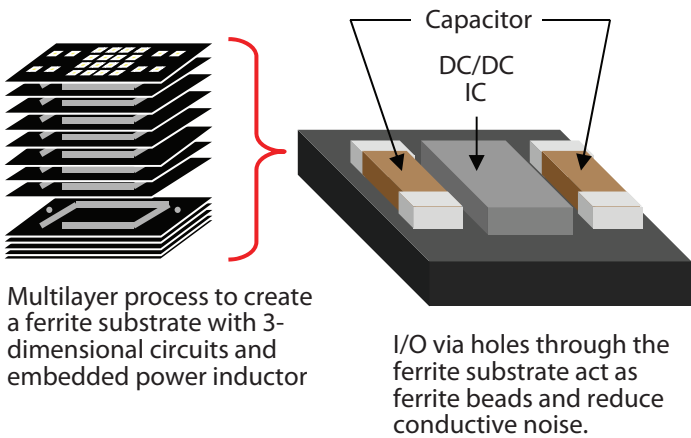
# LXDC Series

## $\mu$ DCDC Converters



Product images not to scale.

### Structure



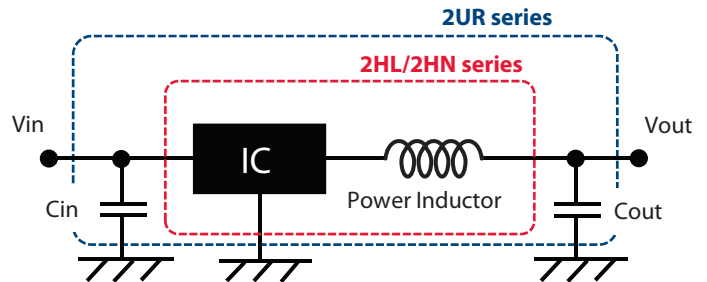
### Features

- 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

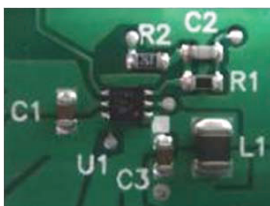
### Application Circuit



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

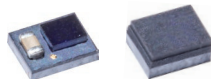
### Downsizing Advantage

#### Discrete Solution



Footprint  
35–60mm<sup>2</sup>

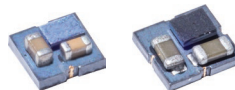
#### 2HL or 2HN Series (0.6A)



2HL 2HN

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

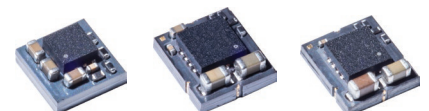
#### 2UR Series (0.6A) 2XQ Series (1.5A)



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						
		2HNN	2.5×2.0×1.2		LXDC2HL25A-053	3.5-5.5	2.5	500									
					LXDC2HL28A-243		2.8	450									
					LXDC2HL30A-054		3.0	400									
					LXDC2HL33A-055		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	450										
LXDC2HN30A-135				3.0		400											
LXDC2HN33A-136				3.3		300											
LXDC2UR12A-118				2.3-5.5		1.2	600	6MHz	3000								
LXDC2UR15A-119						1.5											
LXDC2UR18A-120	1.8																
LXDC2UR30A-143	3.0																
LXDC2UR33A-122	3.3																
≤1.5A	2XQ	2.6×2.8×1.14			LXDC2UR25A-134	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												
				≤3A	55K		5.7×5.0×2.1		LXDC2XQ10A-251	2.7-5.5				1.0	3000	3MHz	1000
									LXDC55KAAA-205					0.8-3.6 Set by trim resistor			
				≤1.5A	55F		5.7×5.0×2.1		LXDC55FAAA-203	4.0-14.0				0.8-5.3 Set by trim resistor	1500	2.5MHz	1000
Buck/Boost	≤1A Buck Mode/ ≤800mA Boost Mode	3EC	3.5×3.2×1.3		LXDC3ECAAD-202	2.5-5.5	3.2-3.4V Set at factory	≤1A Buck Mode/ ≤800mA Boost Mode	6MHz	1000							
Boost	≤0.7A	44A	4.0×4.0×2.0		LXDC44AAAC-169	2.7-5.5	5.0	700	3.3MHz	1000							

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