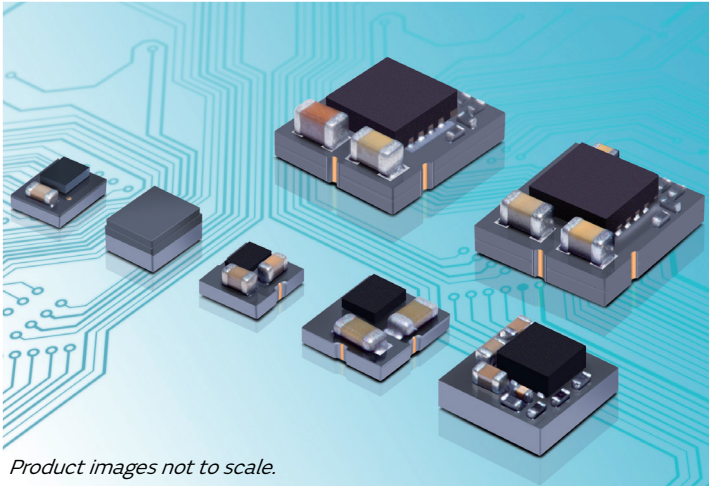


Product Brief

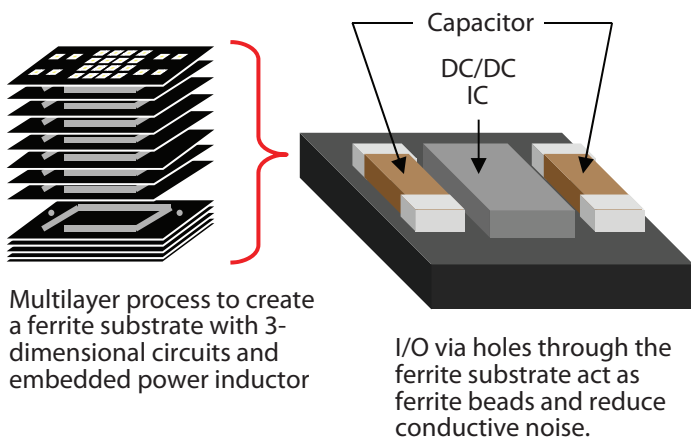
LXDC Series

μ 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.

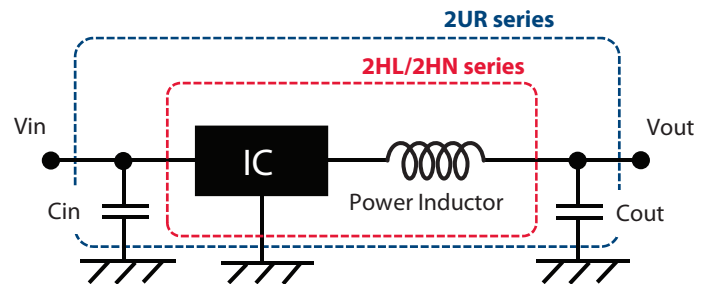
Features

- 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

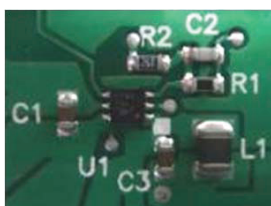
Application Circuit



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

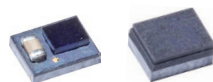
Downsizing Advantage

Discrete Solution



Footprint
35–60mm²

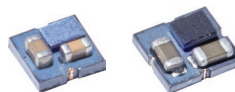
2HL or 2HN Series (0.6A)



2HL 2HN

10mm²
(including two external capacitors)

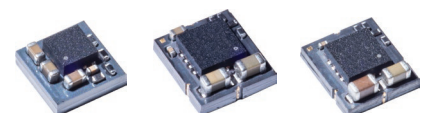
2UR Series (0.6A) 2XQ Series (1.5A)



2UR 2XQ

6–10mm²

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



44A 55K 55F

16–28mm²

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			
		LXDC2HL25A-053	3.5-5.5	2.5	500					
		LXDC2HL28A-243	3.5-5.5	2.8	450					
		LXDC2HL30A-054	3.7-5.5	3.0	400					
		LXDC2HL33A-055	3.8-5.5	3.3	300					
		2HN	2.5×2.0×1.2		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				
	LXDC2HN25A-134	3.5-5.5	2.5	500						
	LXDC2HN28A-235	3.5-5.5	2.8	450						
LXDC2HN30A-135	3.7-5.5	3.0	400							
LXDC2HN33A-136	3.8-5.5	3.3	300							
2UR	2.5×2.3×1.2		LXDC2UR12A-118	2.3-5.5	1.2	600	6MHz	3000		
			LXDC2UR15A-119		1.5					
			LXDC2UR18A-120		1.8					
			LXDC2UR30A-143		3.7-5.5				3.0	
			LXDC2UR33A-122		3.8-5.5				3.3	
			LXDC2XQ10A-251		2.7-5.5				1.0	1.5A
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		LXDC55KAAA-205	2.7-5.5	0.8-3.6	3000	3MHz	1000	
				Set by trim resistor						
55F	≤1.5A	5.7×5.0×2.1		LXDC55FAAA-203	4.0-14.0	0.8-5.3	1500	2.5MHz	1000	
				Set by trim resistor						
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.