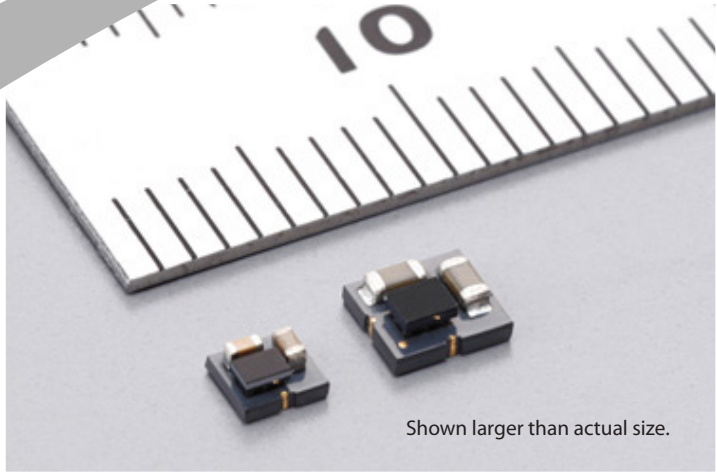


LXDC Series

μDCDC Converters



Shown larger than actual size.

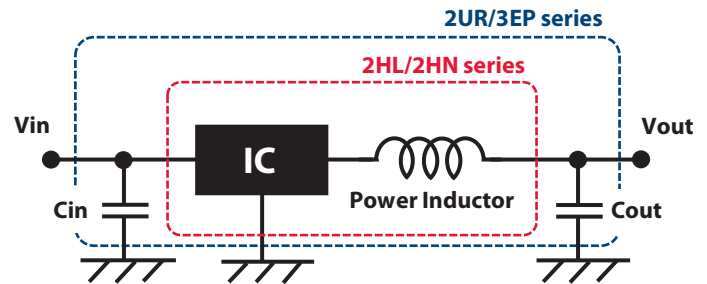
Features

- Low EMI noise and small footprint due to Murata's inductor-embedded ferrite substrate technology
- 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
- Load currents available are 600mA, 1A, 2A, and 3A
- Fixed output voltage = 1.0V, 1.2V, 1.35V, 1.5V, 1.8V, 2.5V, 3.0V, or 3.3V (see product line-up table on back)
- Switching frequency = 3.0, 3.3, 4.0, or 6MHz (see back)
- Operating temperature range = -40 to +85°C

Applications

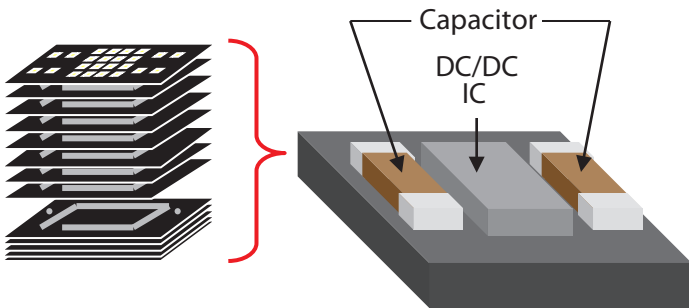
- Any device currently using discrete DC-DC circuits where downsizing and space-savings are required
- Cellular Phones, PDAs, Mobile Internet Devices
- Digital Cameras, eBooks, Tablets, W-LAN, BT
- Portable Game Consoles, Music Players, etc.

Application Circuit



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

Structure

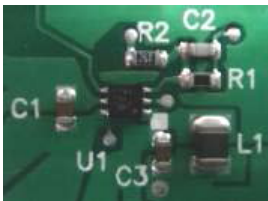


Multilayer process to create a ferrite substrate with 3-dimensional circuits and embedded power inductor

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

Downsizing Advantage

Discrete Solution



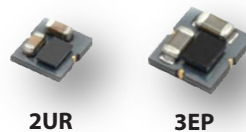
Footprint
35~60mm²

2HL or 2HN Series (0.6A)



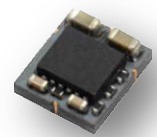
10mm²
(including two external capacitors)

2UR Series (0.6A) 3EP Series (1A)



6-10mm²
(with on-board input and output capacitors)

55K Series (3A)



55K
28.5mm²

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	3,000
					LXDC2HL12A-050	2.3-5.5	1.2			
					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			
		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	3,000
					LXDC2HN12A-099	2.3-5.5	1.2			
					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			
	2UR	2.5×2.3×1.2		LXDC2UR12A-118	2.7-5.5	1.2	600	6MHz	3,000	
				LXDC2UR15A-119	2.7-5.5	1.5				
				LXDC2UR18A-120	2.7-5.5	1.8				
				LXDC2UR30A-143	3.6-5.5	3.0				
LXDC2UR33A-122				3.6-5.5	3.3					
LXDC2UR25A-134				3.5-5.5	2.5	500				
3EP	3.5×3.2×1.3		LXDC3EP10A-176	2.5-5.5	1.0	1000	4MHz	1,000		
			LXDC3EP12A-104	2.5-5.5	1.2					
			LXDC3EP15A-105	2.5-5.5	1.5					
			LXDC3EP18A-106	2.5-5.5	1.8					
			LXDC3EP25A-109	3.0-5.5	2.5					
			LXDC3EP33A-107	4.0-5.5	3.3					
55K	≤3A	5.7×5.0×2.1		LXDC55KAAA-205	2.7-5.5	Set by trim resistor	3000	3MHz	1,000	
44A	≤0.7A	4.0×4.0×2.0		LXDC44AAAC-169	2.7-5.5	5.0	700	3.3MHz	1,000	