

Low EMI μ Module Regulators

EN55022 Class B Certified CISPR 22 Class B Compliant, or CISPR 25 Class 5 Compliant*

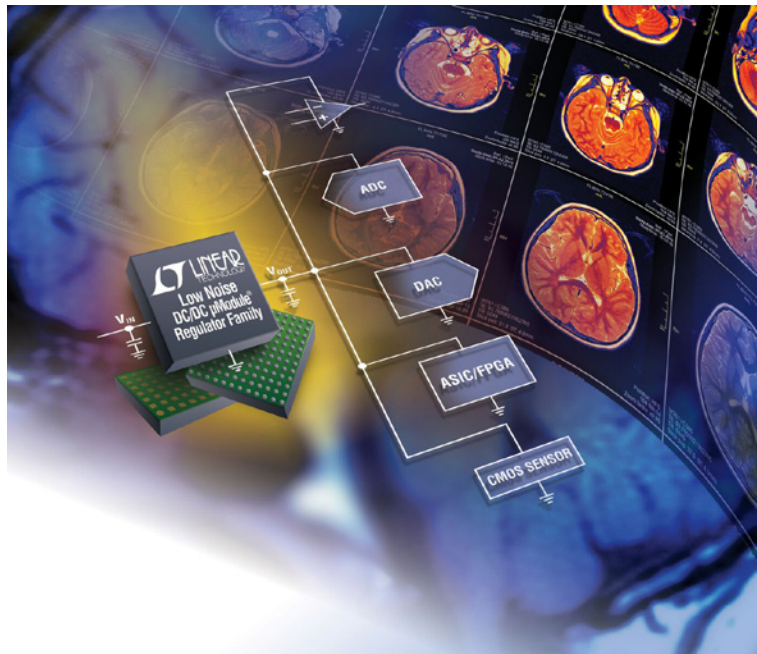
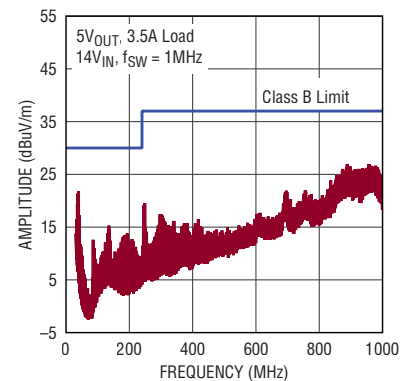
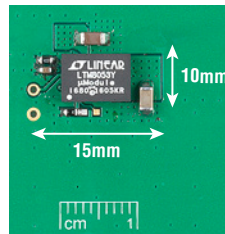
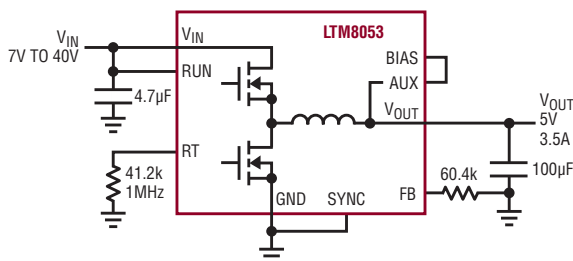


Photo: Medical Imaging Systems

CISPR 22 Class B Compliant, Silent Switcher® Step-Down μ Module® Regulators

- LTM®8073: 60V_{IN}, 3A Continuous, 5A Peak
- LTM8053: 40V_{IN}, 3.5A Continuous, 6A Peak



LTM8053 Typical Application

- Requires Only Four External Components

DC1934A: LTM8053 Demo Board

- Solution Size Is Approximately 150mm²

CISPR 22 Class B Emissions

- DC1934A (LTM8053 Demo Board)
- No EMI Filter

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Standard	Content	Notes
EN55022	European Standard for EMC for Information Technology Equipment	Certified by TUV Rheinland (see EN55022 Test Report**)
CISPR 22	International Standard for EMC for Information Technology Equipment	Verified by Linear Technology
CISPR 25	International Standard for EMC for Automotive Products	Verified by Linear Technology

** EN55022 Test Report: <http://www.linear.com/designtools/packaging/umodule.php#rel>



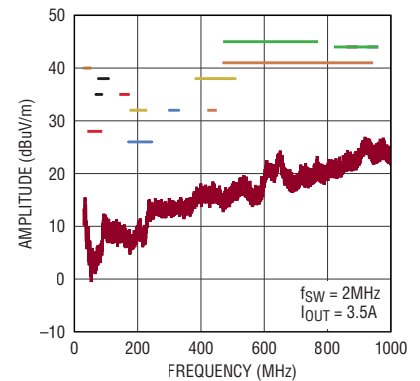
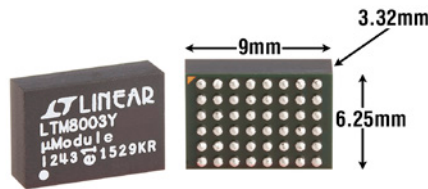
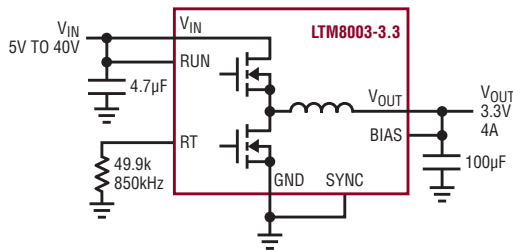
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Low EMI μ Module Regulators

CISPR 25 Class B Compliant, Silent Switcher Step-Down Regulator

LTM8003: 40V_{IN}, 3.5A Continuous/6A Peak with:

- FMEA Compliant Pinout (LTM8003-3.3) Output Stays at or Below Regulation Voltage During Adjacent Pin Short or if a Pin Is Left Floating
- 150°C Operation (H-Grade)
- Low Quiescent Current: 25 μ A (Typ)



LTM8003 Typical Application

- 3.3V_{OUT} from 5V_{IN} to 40V_{IN} Step-Down Converter

FMEA Compliant Pinout

- 6.25mm × 9mm × 3.32mm BGA Package

CISPR 22 Class 5 Peak Radiated

- DC2416A (LTM8003 Demo Board)
- V_{OUT} = 5V, Spread Spectrum Enabled

Part Number	Input Voltage (V)		Output Voltage (V)		I _{OUT} (A)	Clock Sync Range (MHz)	Parallelable Output (Total I _{OUT})*	Package Dimensions (mm)	Package
	Min	Max	Min	Max					
CISPR 22 Class B Compliant, Step-Down μModule Regulators									
LTM8053	3.4	40	0.97	15	3.5 (Continuous) 6 (Peak)	0.2 to 3	×2 (7A)	6.25 × 9 × 3.32	BGA
LTM8073	3.6	60	0.8	15	3 (Continuous) 5 (Peak)	0.2 to 3	×2 (6A)	6.25 × 9 × 3.32	BGA
EN55022 Class B Certified, Step-Down μModule Regulators									
LTM8020	4	36	1.2	5	0.2	–	–	6.25 × 6.25 × 2.32	LGA
LTM8021	3	36	0.8	5	0.5	–	–	6.25 × 11.25 × 2.82	LGA
LTM8031	3.6	36	0.8	10	1	0.25 to 2.0	×2 (2A)	9 × 15 × 2.82	LGA
LTM8032	3.6	36	0.8	10	2	0.25 to 2.0	×2 (4A)	9 × 15 × 2.82 9 × 15 × 3.42	LGA BGA
LTM8033	3.6	36	0.8	24	3	0.25 to 2.0	×2 (6A)	11.25 × 15 × 4.32 11.25 × 15 × 4.92	LGA BGA
LTM4623	4*	20	0.6	5.5	3	0.56 to 4	×2 (6A)	6.25 × 6.25 × 1.82 6.25 × 6.25 × 2.42	LGA BGA
LTM4624	4*	14	0.6	5.5	4	-	-	6.25 × 6.25 × 5.01	BGA
LTM4612	5	36	3.3	15	5	0.18 to 1.3	×2 (10A)	15 × 15 × 2.82	LGA
LTM4606	4.5	28	0.6	5	6	0.7 to 1.1	×2 (12A)	15 × 15 × 2.82 15 × 15 × 3.42	LGA BGA
LTM4613	5	36	3.3	15	8	0.18 to 1.3	×2 (16A)	15 × 15 × 4.32 15 × 15 × 4.92	LGA BGA
CISPR 25 Class B Compliant, Step-Down μModule Regulator									
LTM8003	3.4	40	0.97	18	3.5 (Continuous) 6 (Peak)	0.2 to 3	–	6.25 × 9 × 3.32	BGA

*Number of devices in parallel tested and verified by Linear Technology.