
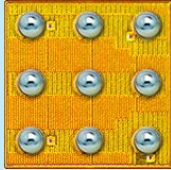
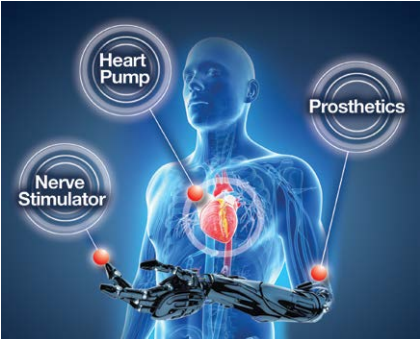



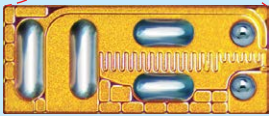
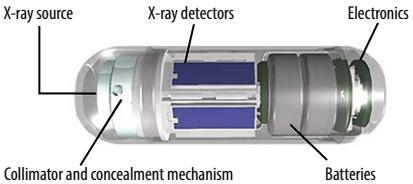



eGaN® FETs and ICs for Medical Technology



	MedTech Application	eGaN Technology	Benefits
Robotics		 EPC2039 80 V, 50 A Die size: 1.35 x 1.35 mm	GaN's small size, thermal efficiency, and high frequency switching contribute to high-resolution motor control for medical robotics
Wireless Power for Implantable Devices	 On-patient wireless power applications	 EPC2107 100 V, 0.5 A Die size: 1.35 x 1.35 mm	eGaN FET's switching speed enables wireless power transfer for implanted devices which eliminates the need for through-skin cables, reducing the mortality rate while making it possible for patients to maintain a quality of life
Imaging Equipment and Diagnostics	 Image resolution is critical to MRI scanners	 MRI Receive coil using EPC8004 courtesy of Case Western University  EPC8004 40 V, 7.5 A Die size: 2.1 x 0.8 mm	eGaN FETs provide improved scanning speed allowing more coils to be employed, thus reducing distortion of the magnetic field and decreasing overall power consumption for imaging equipment
	 Non-invasive "colonoscopy pill" from Check-Cap Ltd	 EPC2012C 200 V, 22 A Die size: 1.7 x 0.9 mm	eGaN FET's high frequency switching increases performance of X-Ray based diagnostic systems and the FET's extremely small chip-scale packaging enables high energy density

Recommended Devices for Medical Technology

Recommended Devices by Application

Part Number	Configuration	V _{DS} (V)	Max R _{DS(on)} (mΩ) @ 5V _{GS}	Q _G typ (nC)	Q _{GS} typ (nC)	Q _{GD} typ (nC)	Q _{OSS} typ (nC)	Q _{RR} (nC)	I _D (A)	Pulsed I _D (A)	Package (mm)	Development Board	Implantable		Medical Imaging and Diagnostics	Robotics
													PSU*	WiPo**		
EPC2014C	Single	40	16	2	0.7	0.3	4	0	10	60	LGA 1.7 x 1.1	EPC9005C				
EPC2055	Single	40	3.6	6.6	2.3	0.7	13	0	29	161	LGA 2.5 x 1.5	EPC9013Z				
EPC2108	Dual	60	240	0.24	0.106	0.047	0.71 0.93	0	1.7	5.5	BGA 1.35 x 1.35	EPC9064				
	Sync Boot		3300	0.044	0.02	0.004	0.134		0.5	0.5						
EPC2035	Single	60	45	0.88	0.25	0.16	2.6	0	1.7	24	BGA 0.9 x 0.9	EPC9049				
EPC8002	Single	65	480	0.133	0.057	0.015	0.344	0	2	2	LGA 2.05 x 0.85	EPC9022				
EPC2039	Single	80	25	1.91	0.76	0.42	7.64	0	6.8	50	BGA 1.35 x 1.35	EPC9057				
EPC2252	Single – AEC-Q101	80	11	3.5	1	0.5	15	0	8.2	75	BGA 1.5 x 1.5	EPC9179				
EPC2107	Dual	100	390	0.19	0.077	0.041	0.9 1.25	0	1.7	3.8	BGA 1.35 x 1.35	EPC9063				
	Sync Boot		3300	0.044	0.02	0.004	0.134		0.5	0.5						
EPC2037	Single	100	550	0.115	0.032	0.025	0.6	0	1.7	2.4	BGA 0.9 x 0.9	EPC9087				
EPC2036	Single	100	73	0.7	0.17	0.14	3.9	0	1.7	18	BGA 0.9 x 0.9	EPC9050				
EPC2106	Half Bridge	100	70	0.73	0.24	0.140	3.96 4.68	0	1.7	18	BGA 1.35 x 1.35	EPC9055				
EPC2051	Single	100	25	1.8	0.6	0.3	7.3	0	1.7	37	BGA 1.3 x 0.85	EPC9091				
EPC2052	Single	100	13.5	3.5	1.5	0.5	13	0	8.2	74	BGA 1.5 x 1.5	EPC9092				
EPC2204	Single	100	6	5.7	1.8	0.8	25	0	29	125	LGA 2.5 x 1.5	EPC9097				
EPC2088	Single	100	3.2	12.5	4.4	1.4	47	0	60	231	LGA 3.5 x 1.95	EPC90123				
EPC2110	Dual Common Source	120	110	0.8	0.25	0.18	4	0	3.4	20	BGA 1.35 x 1.35	EPC9058				
EPC2012C	Single	200	100	1	0.3	0.2	10	0	5	22	LGA 1.7 x 0.9	EPC9004C				

Table data subject to change. Please visit: epc-co.com/epc/Products/gan-fets-and-ics

*PSU = Power Supply Unit
**WiPo = Wireless Power



For More Information

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