

NCP51820

650 V GaN



NCP51820 (e-mode) (GIT) GaN HEMT NCP51820 -3.5 V +650 V GaN NCP51820 (UVLO)

- 650 V, high side and low side gate driver
- Fast propagation delay of 50 ns max
- Matched propagation delay of 5 ns max
- 200 V/ns dV/dt Rating for all SW and PGND Referenced Circuitry
- Separate source and sink output pin
- Regulated 5.2 V gate driver with independent UVLO for high side and low side output stages
- QFN 4 mm x 4 mm 15 pin packaging and optimized pin out
- Design margin for AC/DC design
- Suitable for high frequency operation
- Increased efficiency and allow paralleling
- Robust design for high switching frequency application
- Allow control of rise and fall time for EMI tuning
- Optimum driving of GaN power switches and simplify design
- Small PCB foot print, reduced parasitic, suitable for high frequency operation
- Soft switching ZVS topologies
- Resonant converter
- Active clamp flyback converter
- Bridge totem pole PFC (CrM only)
- Power supply for OLED TV
- High power gaming adapter
- USD PD cellphone and notebook travel adapter
- Server / Cloud offline power

	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V _{in} Max (V)	V _{cc} Max (V)	Rise Time (ns)	Fall Time (ns)	Drive Source Current Typ (A)	Drive Sink Current Typ (A)	Turn On Prop. Delay Typ (ns)	Turn Off Prop. Delay Typ (ns)	Delay Matching	Package Type
NCP51820AMN TWG	0.874	Pb H	Active	GaN	2	Half-Bridge	Junction Isolation	650	20	2	1.5	1	2	25	25	5	QFN-15