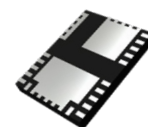
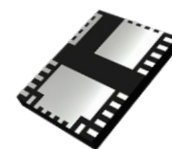
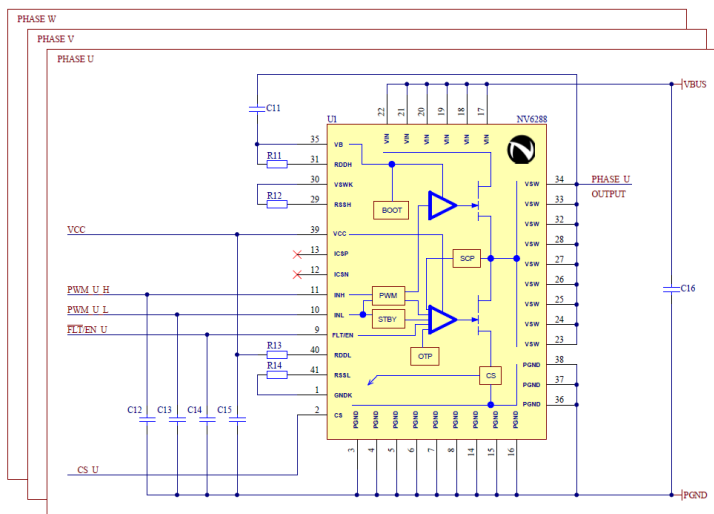


Features	Benefits
Highest integration	15% smaller system size, higher reliability through less components, less design complexity and faster time to market
Bi-directional loss-less current sensing	0.2% lower losses, no hotspot
Full HS/LS short-circuit protection	Robust operation without catastrophic failure
Full slew rate control	20% smaller EMI filter, no motor damage
Automatic freewheeling	0.1% lower losses, no controller loading
Fault communication and HW enable	Full power stage control, less field failures

**POFN 6x8**

POFN 8x10

Typical application schematic (one phase shown)



Reduced system cost and complexity

- No more shunt resistors, avoid hot spot and power dissipation
- Less external components for lower system cost and improved reliability
- Full protection against output short-circuits
- Lower, adjustable EMI for smaller filter size and higher motor reliability

Segment	Application
Home appliance	Air conditioner, heatpump, washing machine, dryer, dishwasher, refrigerator, air purifier, hair dryer
Low power industrial	Circulators, water pumps, cooling pumps, HVAC systems, exhaust fans, cooling fans, home and building automation, material handling, window and door openers



Product portfolio

Part number	Family	System Power (W)	R _{DS(ON)} (mΩ)	Package (PQFN)	Current Sensing (loss-less)	Short-circuit protection	dv/dt control	Autonomous Freewheeling Mode	External Current Sense	Fault communication	OTP
NV6257(-01)	GaNSense™ Motor Drive ICs	400	2x 170	6x8	Bi-directional	High Side & Low-Side	Fully adjustable turn-on & off	No	No	HW-based Enable / Disable	Yes
NV6257(-02)					Uni-directional			Yes	Yes		
NV6257(-03)					Uni-directional			No	No		
NV6287(-01)		500	2x 170	8x10	Bi-directional			Yes	Yes		
NV6287(-02)					Uni-directional			No	No		
NV6287(-03)					Uni-directional			Yes	Yes		
NV6288(-01)		600	2x 120	8x10	Bi-directional			No	No		
NV6288(-02)					Uni-directional			Yes	Yes		
NV6288(-03)					Uni-directional			No	No		