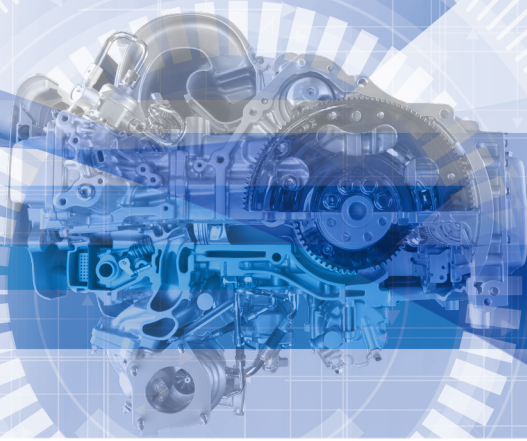




Rayon High Power

Heavy Duty motor fan and HVAC Driver

Let it do the hard work for you

Advantages:

- Sensorless Technology
- High MTBF
- Low TCO

Typical Applications:

- Large vehicles such as Buses, Tractors, Trucks, Caravans etc.
- Heavy military vehicles fan
- Shelters DC backup fans
- General purpose Pump and fan applications
- Industrial HVAC
- Sensor-less Technology
- Reliability: high current 2X 180A, 100V Power MOSFETs
- 60A Heavy duty BLDC motor controller driver
- 6 Phases driver drive
- BEMF rotor position feedback
- PID closed loop modes: Speed and current
- Analog command input. (12bits resolution)
- Analog status output Speed and current. (12bits resolution)
- 60A continues current. (10 sec 100A over drive)
- Communication: CAN BUS (1Mbit- CANopen) and RS232
- External temperature measurement (For motor over heat prevention)
- Protections: Temperature, voltage, CPU, motor stuck ... more
- Comprehensive Error messages
- Housed in stainless steel housing IP68
- Optional comply with MIL- STD 1275, 704A, 761E, 810F
- Optimized for heavy vehicle 27V battery applications



Specifications:

Function	Parameter	Remarks
CPU and Memory		
CORE	TI- TMS320-F2812	32bits DSP
Flash	256 Kbytes	
RAM	36 Kbytes	
CORE Speed	150Mhz	
Motor Interface		
BLDC 3 phases Bridge Drivers	1 Channel	Top drive PWM
Motor Current	60A	
Driving method	Trapezoid drive	
Feedback	Back EMF	12bits resolution
Motor Current Sense	Hall effect device	12bits resolution
General Purpose Interface		
Digital Input/output	4 Channels	Optically isolated (Optional)
Analog inputs 12bits Resolution	1 Channels	0-5V 0-10 V (Optional)
Analog output 12bits Resolution	2 Channels	0-5V 0-10 V (Optional)
Communication Interface		PWM + Low pass
CAN BUS	Single or Dual	CAN 2.0B
UART	2 Channels	RS232 or RS422 comm.
SPI	Master/Slave	UP TO 10Mhz. SCLK.
Power Supply/Operating temperature		
Nominal Voltage	27V	
Operating Voltage	14V to 60VDC	
Quiescent Current	150mA	Core @ 150Mhz.
Operating Temperature	-40°c - +85°c	
Storage Temperature	-65°c - +150°c	
Standards		
MIL-STD 461E	RFI/EMI	
MIL-STD 1275B / MIL-STD 704A	Power input	
MIL-STD-810F	Environmental	



Tecknowledgery Defense

Address: 8 John Walsh Blvd, Peekskill, NY 10566 USA

Tel: +1-914-739-4499 | **Fax:** +1-914-739-5599

Contact us: info@tecknowledgery.com

Website: defense.tecknowledgery.com