500 mA Sinusoidal BLDC Motor Controller

Preliminary Information - Nov 27, 2017

Features
- IC for standalone PMSM applications
- True sinusoidal control with 360° conduction angle
- Internal power bridge up to 500mA(rms)
- Selectable PWM speed and error interface or analog speed interface
- Tacho output
- Current controlled start up
- Integrated configurable error handling
- Blockage detection
- Automatic restart and rotor delocking
- Speed or current control
- Windmill functions
- Safety functions for overtemperature, over-/undervoltage, overcurrent and short circuit

Applications
- Small PMSM / BLDC FANs
- Small PMSM / BLDC pumps

General Description
This IC integrates all components for true sinusoidal drive of small BLDC / PMSM fans or pumps in a standalone application with minimum external component effort.

Ordering Information

<table>
<thead>
<tr>
<th>Ordering-No.:</th>
<th>Temp Range</th>
<th>Package</th>
</tr>
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<tbody>
<tr>
<td>E52381B62C</td>
<td>-40°C to +170°C</td>
<td>QFN20L5</td>
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![Figure 1. E523.81 Demonstration Board](image-url)