

BMM350



UNIT BMM350 Magnetometer I3C Module

v1.0

2025-07-29

Rev. A

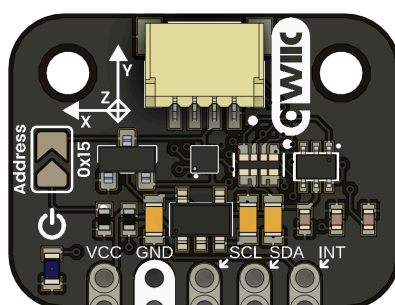
Professional electronic component

PRODUCT OVERVIEW

Professional electronic module designed for reliable performance and easy integration with modern development platforms.

PRODUCT VIEWS

TOP VIEW

*Component placement and connectors*

KEY TECHNICAL SPECIFICATIONS

CONNECTIVITY


Interfaces:

I²C, SPI

Connector:

Qwiic + Pin Headers

KEY FEATURES

-  **High Accuracy Sensing**
Precise environmental parameter measurement
-  **Compact Design**
Space-efficient module for embedded applications
-  **Easy Integration**
Standard interfaces and connectors
-  **Industrial Grade**
Reliable operation in demanding environments

TECHNICAL SPECIFICATIONS

OVERVIEW

FEATURE	DESCRIPTION
Sensor	BMM350 Magnetometer
Communication Protocol	I3C
Power Supply	3.3V or 5V

TECHNICAL SPECIFICATIONS

PARAMETER	TECHNICAL DATA
Package dimensions	1.28 x 1.28 x 0.5 mm ³ wafer level chip scale package (WLCSP)
Operating range	-40 °C to 85 °C
Supply voltage	VDDIO: 1.72 V ... 3.6 VVDD: 1.72 V ... 1.98 V
Typical output noise rms	3dB BW = ODR/2± 190 nTrms (x,y axis) and ± 450 nT rms (z axis)
Sensitivity Temperature Drift (typ.)	± -0.010 %/K
Average typical current consumption	200 µA @ 100 Hz in normal mode
Magnetic field range, all axes	± 2000 µT
Zero-field offset drift after soldering (typ.)	± 25 µT
Sensitivity/gain error after soldering (typ.)	± 1 %
Interface	I2C and I3C
TCO error (typ.)	± 200 nT/K
Maximum sampling rate	400 Hz (normal mode)

SUPPORTS

SYMBOL	I/O	DESCRIPTION
VCC	Input	
GND	GND	
IO	Bidirectional	

HARDWARE DOCUMENTATION

CIRCUIT SCHEMATIC



Circuit Schematic

Complete circuit schematic showing all component connections

PIN DESCRIPTION

Detailed pin assignment and electrical specifications

SIGNAL DESCRIPTION

FUNCTION	NOTES
Power Supply	3.3V or 5V
Ground	Common ground for all components
I3C Data Line	Connect to I3C data line
I3C Clock Line	Connect to I3C clock line
Interrupt	Optional, for interrupt-driven operation

GROUP	AVAILABLE PINS	SUGGESTED USE
GPIO		
UART		
TouchPad		
Analog		
SPI		

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Professional Technical Datasheet

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For commercial distribution