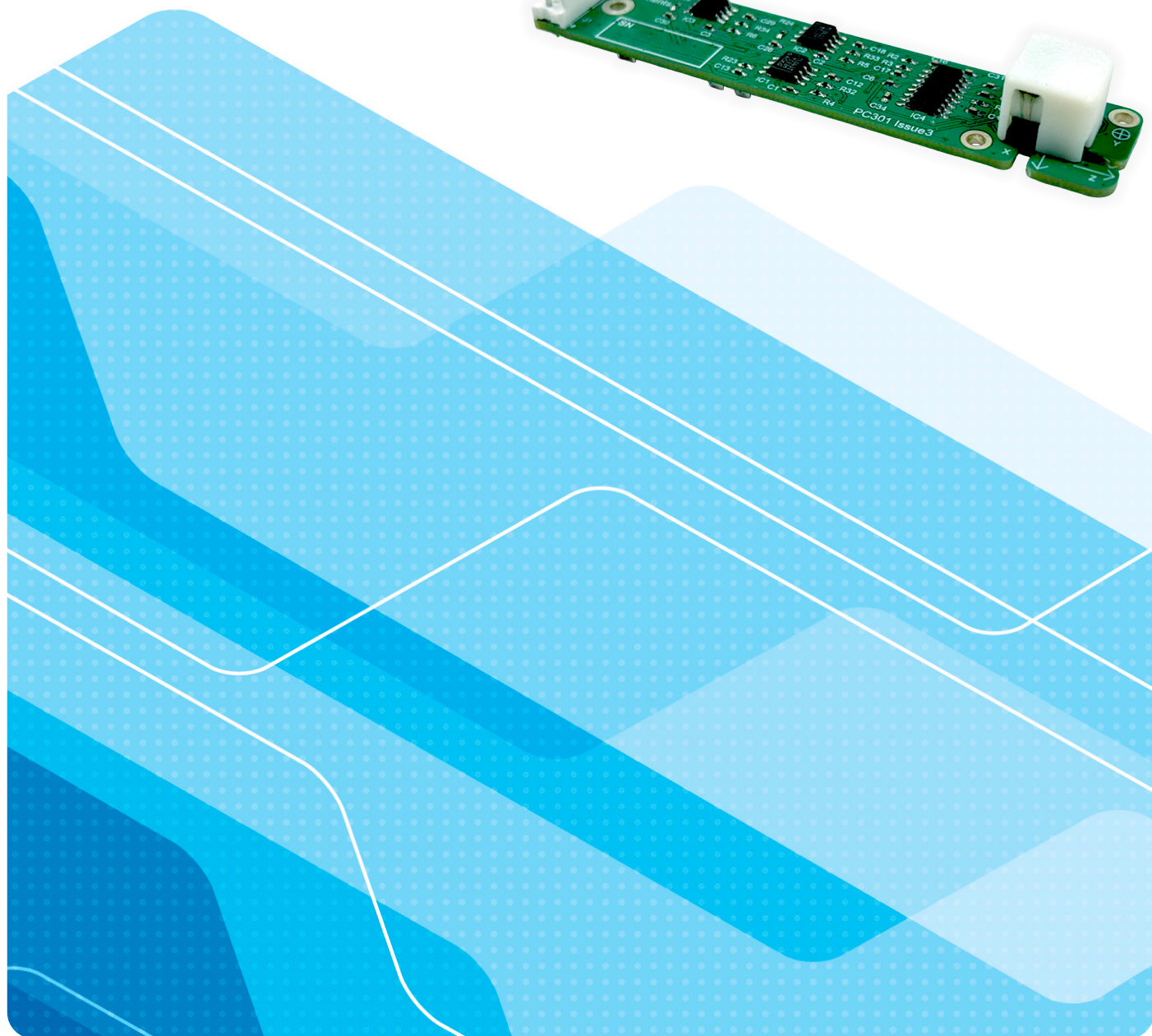
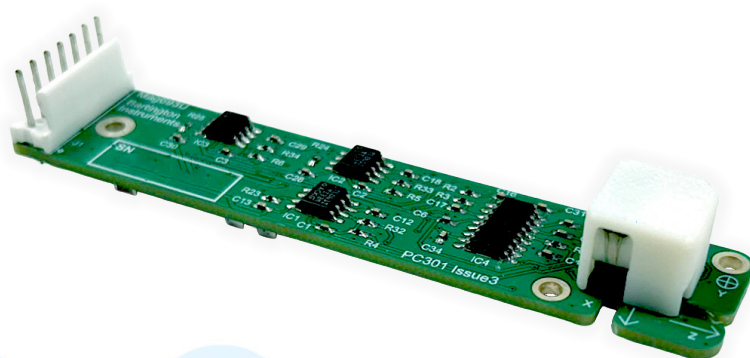


Mag693U

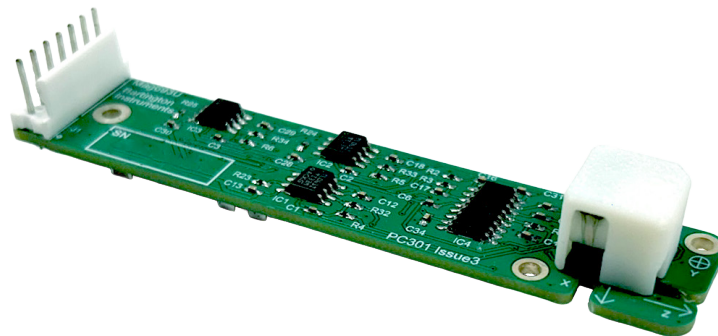
3-axis Analogue Magnetic Field Sensor





Mag693U 3-axis Analogue Magnetic Field Sensor

This ultra-low cost unpackaged 3-axis analogue magnetic field sensor is designed for cost-critical applications. Its small unpackaged form factor allows users to integrate it into their own systems.



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Features

- Ultra-low cost
- Unpackaged
- Small form factor



Product Identification

Product name	Package	Noise	Range
Mag693	U = Unpackaged	no code = standard noise	100 = $\pm 100\mu\text{T}$

Example: Mag693U-100 = Unpackaged, 100 μT range



Specifications

Performance	
Number of Axes	Three (right-hand XYZ coordinate system)
Polarity	+ve non-inverting output when pointing North
Full Scale Measuring Range	100 μ T
Scaling Calibration Error at 23°C	< $\pm$ 5%
Linearity Error	0.05% FS Range (least squares fit)
Frequency Response	DC to 100Hz, maximum flat response ($\pm$ 5%)
Bandwidth at -3dB	500Hz minimum
Noise	>10 to $\leq$ 150pTrms/ $\sqrt$ Hz at 1Hz
Zero-Field Offset	< $\pm$ 1000nT
Orthogonality error between axes	<2°
Excitation Breakthrough	<100mV pk-pk at 31.25Hz typical
Warm-up time	60 minutes

Environmental	
Operating temperature range	-20°C to +80°C
Storage temperature range	-20°C to +80°C
IP Rating	N/A
Compliance	EMC BS EN 61326 & RoHS



Mag693U 3-axis Analogue Magnetic Field Sensor

Mechanical	
Dimensions	88 x 18 x 15mm
Weight	<10g
Connectors	AMP / TE Connectivity 640456-7
Mounting Arrangements	3 x M2.5 clearance holes on PCB

Electrical	
Supply Voltage	$\pm 12 - 15V$
Current Consumption – Positive	+47mA typical
Current Consumption – Negative	-2mA typical
Analogue Output	$\pm 10V$ single-ended
Output Impedance	10 Ω





The specifications of the products described in this brochure are subject to change without prior notice.

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