

Impinj M800 Series RAIN RFID Tag Chips



Impinj M830 and M850 tag chips set a new benchmark in readability and advanced features to meet the increasing demands of large-scale enterprise solutions

Delivering next-generation performance

Impinj M800 series RAIN RFID tag chips set a new benchmark in readability, designed to help enterprises read the right tags at the right time. The Impinj M800 series offers:

- Improved readability for reliable reading of small tags at high volume and speed
- Enhanced tag reliability and manufacturability, featuring Impinj Enduro V2
- Advanced features for managing tagged items, including Impinj AutoTune V3

Next-generation Impinj M800 series tag chips feature improved tag readability to allow reliable reading of small tags at high volume and speed, supporting efficient global operations.

Advanced item connectivity for enterprise IoT deployments

Impinj M830 and M850 RAIN RFID tag chips feature low power requirements and unmatched readability that allow businesses to use a single, small tag across a broad range of items — apparel, electronics, sporting goods, home goods, and other general merchandise — within their global operations. Tags built with the Impinj M800 series enhance the performance of RAIN RFID deployments from retail to supply chain and logistics and beyond. Drop-in compatible with Impinj M700 series antenna designs, the Impinj M800 series enables quick time-to-market.



Impinj M830 and M850 tag chips

Impinj tag chip features for high-performance RAIN RFID tags

Protected Mode tag data protection

Impinj Protected Mode makes a RAIN tag invisible to RAIN readers. The tag can be returned to normal operation, and made visible to RAIN readers, using a secure PIN

Enduro V2 bonding technology

Updated Impinj Enduro bonding pad design strengthens chip-to-antenna connection, enhancing tag reliability and manufacturability

AutoTune V3 adaptive RF tuning

Upgraded Impinj AutoTune improves tag sensitivity for enhanced readability across a range of materials, tag form factors, and operating frequencies

TagFocus read redundancy prevention



Improved capabilities prevent multiple reads of the same chip, so hard-to-read tags can be read more accurately within a complex population of tags

FastID high-speed reading

FastID reduces inventory time by simplifying the steps needed to identify a tag when using a TID-based numbering system

Integra V2 memory diagnostics

This suite of diagnostics verifies tag chip health and validates data encoding, enabling more reliable tags and consistent delivery of accurate data

Impinj M800 series tag chips			
		M830	M850
SPECS	Air Interface Protocol	RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant	
	EPC memory	128	96
	User memory	0	32
FEATURES	Read sensitivity (dBm)	-25.5	
	Impinj AutoTune™ automatic RF tuning	V3	
	Access/Kill password	Shared	
	Impinj Integra™ memory diagnostics	V2	
	Impinj Enduro™ robust bonding construction	V2	
	Impinj Protected Mode	✓	
	GS1 EPCglobal Gen2 Untraceable / Short-range	✓	
	RF compatibility	All M700 and M800 series tag chips are compatible	
	Omnidirectional reading	Impinj Core3D Antenna™	
	Impinj TagFocus™ read redundancy protection	✓	
	Impinj FastID™ high speed reading	✓	

Impinj product performance is based on Impinj's modeling and test data. Actual results may vary.

Ready to discuss how Impinj can help your business?

Contact us: www.impinj.com

Impinj (NASDAQ: PI) helps businesses and people analyze, optimize, and innovate by wirelessly connecting billions of everyday things—such as apparel, automobile parts, luggage, and shipments—to the Internet. The Impinj platform uses RAIN RFID to deliver timely data about these everyday things to business and consumer applications, enabling a boundless Internet of Things.