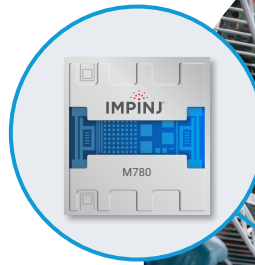# Impinj M700 Series RAIN RFID Tag Chips

Impinj M700 series RAIN RFID tag chips provide high performance, fast inventory capability, and advanced features for next-generation, universal RAIN RFID tags.

Connect everything with high-performance tag chips

Impinj M700 series RAIN RFID tag chips can be attached to or embedded in nearly any item to enable solutions for high-speed inventory counting, loss prevention, frictionless self-checkout, seamless product returns, and product authentication.

Why use Impinj M700 series chips

All Impinj M700 series tag chips are suitable for tagging a wide range of items, delivering high performance, quality, and reliability.

Impinj M730, M750, M770 tag chips

Read items fast, from far away
Tag readability enables items to be read at long distances and quickly to reduce inventory time and improve productivity.

Support embedded tagging and consumer privacy
New capabilities enable innovative solutions for consumer privacy, loss prevention, and embedded tagging.

Choose tags for all kinds of items
Performance enables small, universal, cross-compatible tags that can operate worldwide, simplifying the tag supply chain for global enterprises.

Impinj M775, M780, M781 tag chips

Advanced capabilities

Fight counterfeits and authenticate products
Impinj M775 tag chips enable cryptographic authentication of tagged items for fast, automated verification that a product is genuine and that the supply chain is secure.

Pinpoint recalled products and ensure freshness
Impinj M780 and M781 tag chips feature large memory capacity for capturing extended product attributes such as batch/lot numbers, dates, net weight, or use-by dates.

Impinj tag chip features for high-performance RAIN RFID tags

Impinj Gen2X Protection
Protects consumer privacy, inhibits fraudulent returns, speeds EPC-to-TID verification, validates tag data encoding, and protects tag data integrity.

Impinj Protected Mode
Tag data protection that 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.

Impinj Enduro bonding technology
Provides updated bonding pad design for optimal mechanical stability and assembly consistency that improves tag yield, reliability, and durability.

Impinj TagFocus read redundancy prevention
Unique algorithm prevents multiple reads of the same chip so that hard-to-read tags can be read more accurately within a complex population of tags.

Impinj AutoTune V2 adaptive RF tuning
Optimizes performance to the tag's environment for improved readability across a range of materials, tag form factors, and operating frequencies.

Impinj Integra V2 memory diagnostics
Suite of diagnostics verify tag chip health and validate data encoding to consistently deliver more accurate data and reliable tags.

Impinj M700 Series Tag Chips

		M730	M750	M770	M775	M780	M781
SPECS	Air interface protocol		RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant. Supports Impinj Gen2X, an enhancement to the RAIN radio standard				
	EPC memory	128	96	128	128	496	128
	User memory	0	32	32	32	128	512
	Read sensitivity (dBm)	-24	-24	-24	-24	-23.5	-23.5
	Write cycles/data retention	10,000/10 yrs	10,000/10 yrs	100,000/20 yrs	100,000/20 yrs	100,000/20 yrs	100,000/20 yrs
FEATURES	Impinj AutoTune V2 automatic RF tuning	✓	✓	✓	✓	✓	✓
	Access/Kill password	Shared	Shared	Shared	Shared	Shared	Shared
	Impinj Enduro robust bonding construction	V1	V1	V1	V1	V2	V2
	Impinj Unkillable Mode			✓	✓	✓	✓
	GS1 EPCglobal Gen2 Untraceable/Short-range	✓	✓	✓	✓	✓	✓
	Omnidirectional reading	With Impinj Core3D antenna reference designs					
IMPINJ GEN2X	Impinj TagFocus read redundancy protection[1]	✓	✓	✓	✓	✓	✓
	Impinj Integra V2 memory diagnostics[2]	✓	✓	✓	✓	✓	✓
	Impinj Authenticity cryptographic authentication[2]				✓		
	Impinj FastID high speed reading[2]	✓	✓	✓	✓	✓	✓
	Impinj Protected Mode tag data protection[2]	✓	✓	✓	✓	✓	✓

Impinj product performance is based on Impinj's modeling and test data. Actual results may vary.
1. Impinj TagFocus is included in Impinj Gen2X Performance
2. Impinj FastID, Impinj Authenticity, Impinj Integra, and Impinj Protected Mode are included in Impinj Gen2X Protection

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.

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