

# Impinj M700 Series RAIN RFID Tag Chips Extend IoT



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

## Bring IoT to retail with high-performing tag chips

The Impinj M700 series is a premium family of RAIN RFID tag chips that can be attached to or embedded in nearly any item to enable solutions for high-speed inventory counting, loss prevention, frictionless self-checkout, and seamless product returns. Impinj M700 series products come in a range of EPC and user memory configurations with capabilities such as cryptographic authentication for product authentication.

## Why use Impinj M700 series chips

Impinj M700 series tag chips bring game-changing advancements to RAIN RFID. Ideal for large-scale, global deployments, Impinj M700 tag chips deliver high-performance, quality, and reliability.

**Read items faster, from farther away:** improved tag readability enables items to be read at longer distances, and read faster to reduce inventory time and improve productivity

**Support next-generation RAIN solutions:** new capabilities enable innovative solutions for consumer privacy, anti-counterfeiting, loss prevention, and embedded tagging

**One universal tag for all items:** allows for small, universal tags that can operate worldwide, simplifying the tag supply chain for a global enterprise



*Impinj M730, M750, M770 and M775 tag chips*



## Introducing the Impinj M775 tag chip for product authentication applications

The Impinj M775 tag chip is a high-performance RAIN RFID tag chip with an ISO/IEC 29167-11 based cryptographic engine and a unique Impinj-programmed cryptographic key. Together with the Impinj Authentication Service, it enables cryptographic authentication of tagged items.

# Impinj tag chip features for high performance RAIN RFID tags

## Tag data protection

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™ IC bonding technology

Patented bonding pad design optimizes eco-friendly tag performance and delivers high-quality tags for improved tag yield, reliability, and durability

## FastID™ high-speed reading

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

## Enhanced AutoTune™ adaptive RF tuning





Optimize performance to the tag's environment for improved readability across a range of materials, tag form factors, and operating frequencies

## Enhanced Integra™ memory diagnostics

Suite of diagnostics verify tag chip health and validate data encoding to consistently deliver more accurate data and reliable tags

## 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 Tag Chips					
		M730	M750	M770	M775
SPECS	Air Interface Protocol	RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant			
	EPC memory	128	96	128	128
	User memory	0	32	32	32
	Read sensitivity (dBm)	-24	-24	-24	-24
FEATURES	Impinj Enhanced AutoTune™ automatic RF tuning	✓	✓	✓	✓
	Access/Kill password	Shared	Shared	Shared	Shared
	Impinj Enhanced Integra™ memory diagnostics	✓	✓	✓	✓
	Impinj Enduro™ robust bonding construction	✓	✓	✓	✓
	Impinj Protected Mode	✓	✓	✓	✓
	Impinj Unkillable Mode	-	-	✓	✓
	GS1 EPCIS Gen2 Untraceable / Short Range	✓	✓	✓	✓
	GS1 EPCIS Gen2 Authenticate	-	-	-	✓
	RF compatibility	All M700 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](http://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.