Designed for performance and flexibility, the platform allows Thinfilm customers to manage and optimize NFC-enabled items in real time through the web. Brand owners can use the power of Thinfilm's unique IDs to quickly and easily update the digital content activated by a product's NFC tag for promotions or to alert consumers to the recall of suspect products. NFC tags can also be used to bridge the physical and digital worlds in toys & games, where tag IDs can be used to trigger actions, enable characters, identify players, and more.

The NFC Barcode also enables powerful B2B applications, including supply chain management and asset tracking. Unique identifiers built into every NFC Barcode can be used to fight counterfeiting and unwanted product diversion. Easier to use and more reliable than a QR code or direct data entry, NFC Barcode tags enable highly efficient and user-friendly data collection at the item level, particularly when individual items need to be audited.

Thinfilm NFC Barcode paves the way for affordable item-level intelligence using proprietary printed electronics technology.

The Thinfilm NFC Barcode is a revolutionary wireless tag that combines the instant interactivity of Near Field Communication with the advantages of printed electronics technology. By effortlessly connecting the physical and digital worlds, the NFC Barcode enables smartphones to communicate with NFC-enabled everyday objects in support of B2B and B2C use cases.

The Thinfilm NFC Barcode technology enables item-level B2C interaction between consumers and brands. Physical products can instantly gain a digital identity through integration with the EVRYTHNG cloud-based software platform. The EVRYTHNG engine is a dynamic, scalable, cloud-based identity management platform that provides seamless management of the NFC tags integrated into products, marketing, and advertising.

Connect everyday objects to the Internet of Everything with the Thinfilm NFC Barcode.
Markets & Applications

- Mobile marketing and advertising
- Interactive packaging
- Product recall management
- Supply chain tracking
- Asset tagging
- Tax and regulatory monitoring
- Anti-counterfeiting and anti-diversion monitoring
- Electronic toys and games

Features & Benefits

- Uniquely identifiable NFC tags can be integrated into everyday items, including consumables and their packaging
- Instant, definitive, and user friendly interaction between consumable items and widely available NFC-enabled smartphones.
- Combine with cloud-based software application services from EVRYTHNG to enable endlessly flexible and customizable NFC-triggered Active Device Identities™
- To thwart cloning, tag memory is completely and permanently encoded at the Thinfilm factory and cannot be electrically modified
- Highly efficient, streamlined Tag-Talks-First (TTF) enables faster packaging and production line speeds
- Passive operation - requires no tag battery
- Unique tag identifiers enable tracking and advanced analytics to monitor supply chain performance and isolate problems
- Supported by the latest NFC controllers from leading manufacturers
- Supported by Android 4.2 and later
- Tag is physically flexible and lightweight

Key Specifications

- 13.56 MHz High Frequency (HF) operation for compatibility with fixed and mobile NFC readers, from smartphones to industrial readers
- 128 bits Read Only Memory (roadmap to 256 bits)
- Adheres to subset of ISO 14443 Type A RFID standard
- Supports popular data structures such as 96-bit GS1 EPC (Electronic Product Code)
- 106 Kbit/sec data transfer, Manchester bit encoding and OOK load modulation at 847 kHz
- 16-bit CRC for data integrity and verification
- < 300 μm thick