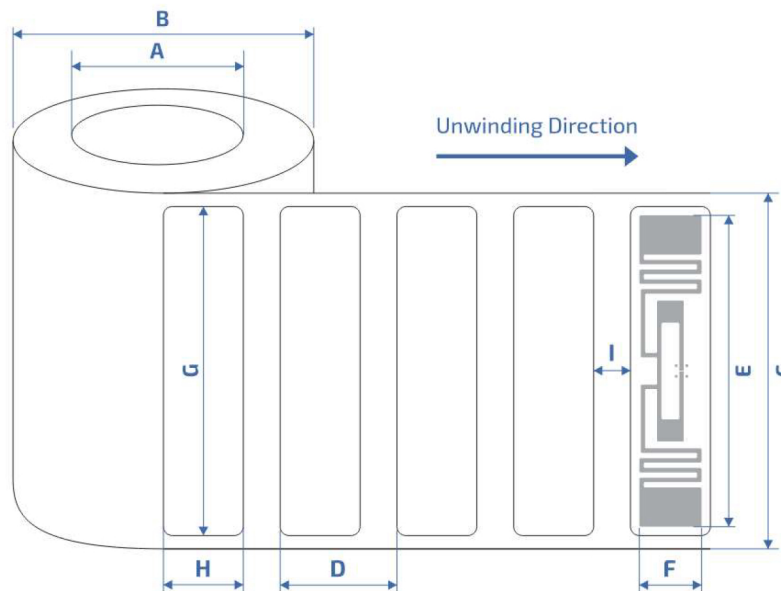


Product Specification

IC - Integrated Circuit

| | | | |
|------------------------|---|------------------------------|------------------------------|
| SKU | TBD | AN871N105 | AN871N106 |
| Model | NXP UCODE 7 | NXP UCODE 8 | NXP UCODE 9 |
| TID | 96 bits (48 bits serialized) | 96 bits (48 bits serialized) | 96 bits (48 bits serialized) |
| EPC | 128 bits | 128 bits | 96 bits |
| User | None | 0 bit | 0 bit |
| Reserved | 32 bits Access, 32 bits Kill | 32 bits Access, 32 bits Kill | 32 bits Kill |
| Data Retention | 50 years | 50 years | 50 years |
| Programming Cycles | 100,000 cycle endurance | 100,000 cycle endurance | 100,000 cycle endurance |
| Read Sensitivity | - 21 dBm | - 23 dBm | - 24 dBm |
| Write Sensitivity | - 16 dBm | - 18 dBm | - 22 dBm |
| Operating frequency | 860-960 MHz | | |
| Air interface protocol | RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 | | |

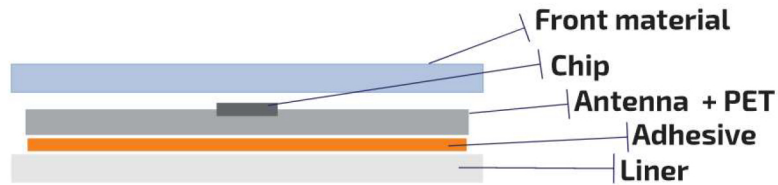
Mechanical Specification



| Dimension | Item | Metric [mm] | Tolerance [mm] | US [in] |
|-----------|------------------------------------|-------------|----------------|---------|
| A | Core inner diameter | 76.2 | 2 | 3.05 |
| B | Roll max outer diameter (\leq) | 203.2 | 5 | 8.13 |
| C | Web width | 80 | 2 | 3.20 |
| D | Pitch length per piece (MD) | 26.307 | 2 | 1.052 |
| E | Antenna width | 70 | 0.2 | 2.80 |
| F | Antenna height | 14 | 0.5 | 0.56 |
| G | Die-cut width | 74 | 1 | 2.96 |
| H | Die-cut height | 18 | 2 | 0.72 |
| I | GAP | 8.307 | 2 | 0.332 |
| | Register Mark | NA* | NA* | NA* |

* Not applicable.

Product Structure



| | |
|----------------------------|--|
| Front material | White BOPP |
| Back Material | Liner, 60 g/m ² |
| Antenna material | Aluminum 10 μm on a PET 50μm substrate |
| Adhesive | Functional Permanent PSA Acrylic |
| Min. labelling temperature | -10 °C |
| Service temperature | -10 to 80 °C (maximum related to the top high temperature of the adhesive) |
| Peel min. | 3 N / 25 mm (FTM 2) |
| Total Thickness | 213 μm (± 13 μm) |

Characteristics

| | |
|------------------------------|----------------------------------|
| Max. consecutive faulty tags | 3 |
| IC operating temperature | -40 °C to 85°C, 50 % RH |
| Shelf life | 1 year (from manufacturing date) |
| Storage | 23 °C ±3 °C / 50% RH ± 5% |
| ESD voltage immunity | 2 kV peak HBM (Human Body Model) |
| Bending diameter | > 50 mm, tension less than 10 N |

Packaging

| | |
|-------------------|--------------------|
| Qty per Roll | 5,000 |
| Roll Net Weight ≈ | 3 kg - 6.61 lbs |
| Box | 240 X 240 X 120 mm |
| Master Box | NA* |

* Not applicable.