DATASOFT MANUFACTURING & ASSEMBLY

PRODUCT OVERVIEW

DMA dCard (NFC Technology) with payG-POS



PayG-POS Device

What is PayG-POS.

- Pay As You Go - Point of Sale (payG-POS).
- POS is a small device where NFC card touch can execute the cashless payment transaction, among others:
  a. Loyalty Card for Reward Points
  b. Redeemable as per the merchant reward qualification program
  c. Discount Card for immediate discount from a retailers
  d. Loan transaction & management card
  e. Product Catalog based purchase, limit cash withdrawal
  f. Cashless from MFC (bKash, Nagad, Upay, etc.)
  g. Cashless from Visa Card, Mastercard, American Express, etc.

Payment Journey

1. Card is bind with a payment partner, dCard by Touch on a PayG-POS can pay the Merchant automatically. (amount sent to SMS)
2. Customer gets SMS confirmation.
3. Customer gets SMS confirmation upon CVV/PIN based transaction.

DMA PayG POS and NFC Card

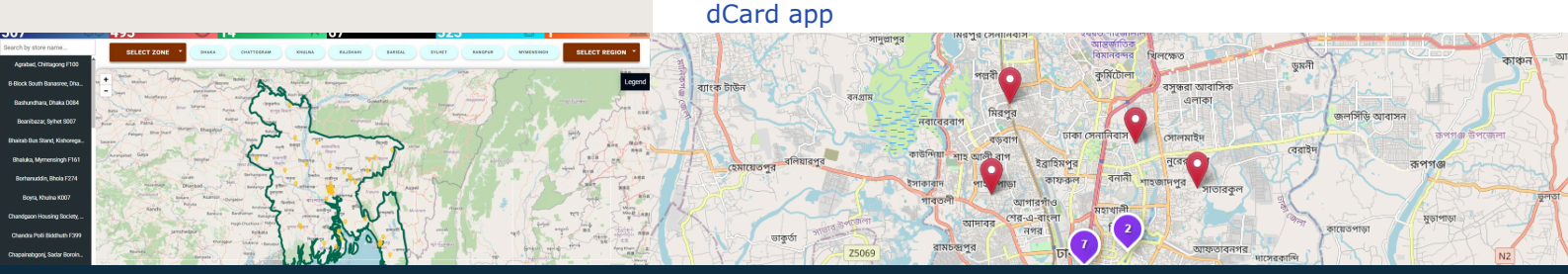
DMA NFC payG POS and the NFC card is designed to meet the challenges for cashless Transaction in Bangladesh, where cash, Bank Cards, Metro cards, Felica cards and mobile apps are not the only option to pay for a service or products.

A concept for Bangladesh – that's the NFC card, with a PKI solution to everyone without having Cash, Bank Cards, Visa, Mastercard, Metro cards, Felica cards and mobile apps, the DMA NFC card (known as dCard) can pay with a simple touch and go.

Simple and intuitive DMA NFC cards eliminate cash payment and burden of carrying cash, while the merchant get the cashless transaction to their bank account without having to worry about missing cash or cash handling costs.

Simple & intuitive

- Automated ledgers are available in real-time, whereby Merchant can find out the cashless transactions real-time anywhere from the world.
- The DMA NFC card can be obtained from any MFS retailers or any retailers as pre-registered card. A registered card with Name can be obtained from the online portal or from a mobile app.
- On the first transaction the card will be validated over an OTP, then a simple touch-and-go on a PayG-POS. The PayG-POS devices are locally made in DMA factory and can be obtained with a subscription model.
- Customer dCard app will retain the history of all transactions, including the Loyalty points and redemptions.
- Customer can also (activate/deactivate dCard) which will be validated by OTP.
- Customer can bind/unbind from any payment partners over the dCard app



NFC Specification

NFC stands for Near Field Communication, which is a wireless technology that allows devices to exchange data over short distances (usually less than 10 cm). NFC tags are small devices that store data and can be read by NFC readers, such as smartphones or terminals. NFC tags and readers work based on the ISO 14443A standard (13.56 MHz) and use electromagnetic induction to communicate.



SOS IoT Button

Why Compact?

- Easy Installation
- Minimize Theft and Vandalism
- Easy Repair and Replacement
- Easy Maintenance
- Easy Manual Data Retrieval
- Readily Available



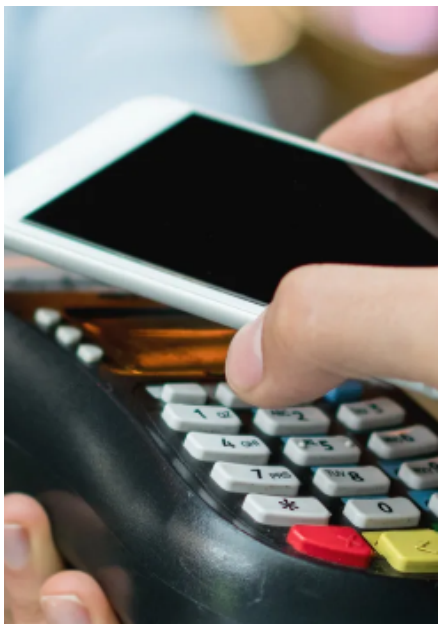
DMA Design



Common technical points

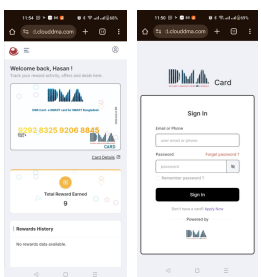
- Protocol / compatibility: ISO/IEC 14443-A; NFC Forum Type 2 tags — readable by most NFC phones and readers that support Type 2.
- Operating distance: depends on antenna geometry; typical passive read range up to a few cm (often quoted up to ~10 cm under ideal conditions).
- Data transfer: typically up to 106 kbit/s.
- Memory organization: 4-byte pages; manufacturer/reserved pages (UID, lock bits, config), OTP pages and user RW pages.
- Typical applications: transit single-use/reloadable tickets, event tickets, loyalty cards, disposable keycards, simple asset tags
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AUTOMATED ALERT & NOTIFICATIONS



Card Activation and Binding

- The card will be process within a week and send to the customer via the Merchant or courier service.
- Upon receiving the dCard, Customer uses mobile App or the weblink to Activate dCard.
- QR code scan to get OTP to activate dCard.
- Customer binds with the MFS wallet or Bank-Card (Visa, American Express, Mastercard, etc.) over the dCard App.



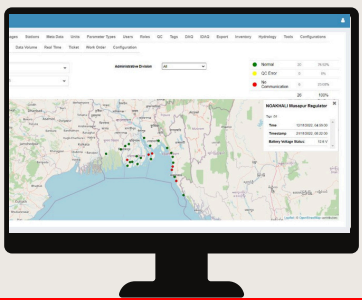


DMA-MIFARE Ultralight C (MF0ICU2):

- Standard / freq: ISO/IEC 14443-A, 13.56 MHz (NFC Forum Type 2).
- Memory: total ~192 bytes; usable ~144 bytes (implementation dependent; often listed as 192-byte total / 144 usable).
- UID: 7-byte.
- Security: 3DES (Ultralight C supports 3DES authentication) or password protection variant depending on datasheet — used to protect writes/operations against cloning.
- Data rate / endurance / retention: 106 kbit/s, ~100k write cycles, ~10 years retention.
- Use: higher-security single-use tickets, transit, access credential where simple authentication is required.







Sep 16, 2025, 04:41 PM	Battery 0 SN: 1243042509020000	Offline	Unknown 75%	12.5V	26.29A	Discharging	328.51W	38.4°C Normal	110	Sep 16, 2025, 04:40 PM	Offline	Niketan Dhaka
Oct 22, 2025, 08:08 PM	Battery 1 - Test Bed SN: 1243042509020001	Offline	Unknown 5%	0.87V	0.14A	Discharging	0.12W	31.4°C Normal	9	Oct 14, 2025, 07:27 PM	Offline	10/1, N Dhaka, Divisio
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HOW TO GET:

DMA NFC Card

A QRcode available at the Merchant to request for a card.