PRODUCT BRIEF

eCoM: eco-friendly Coil on Module

Innovation driving the eco-friendly evolution of payment cards

Our innovative package named eco-friendly Coil on Module (eCoM) is a game-changer for payment cards as it paves the way for more sustainability and an environmentally responsible future for the payment industry. The eCoM package enables recyclable materials to be used and card bodies to be fully recycled while reducing CO_2 emissions in raw material sourcing and logistics.

Unlike standard dual-interface payment cards, which embed a copper wire antenna to enable the contactless interface, this innovative package makes this antenna unnecessary. This has major advantages across the entire lifecycle of payment cards – from initial design to disposal, while offering very good contactless performance and proven user acceptance in the field.

The use of eCoM in payment cards reduces CO_2 emissions associated with the sourcing and logistics of the raw materials (security chip and module) for card production by more than 60% compared with standard chip and module offering (CoM), as reported by Climate Partner. This major emission saving is due to the absence of (up to 2 meters) of the antenna copper wire.

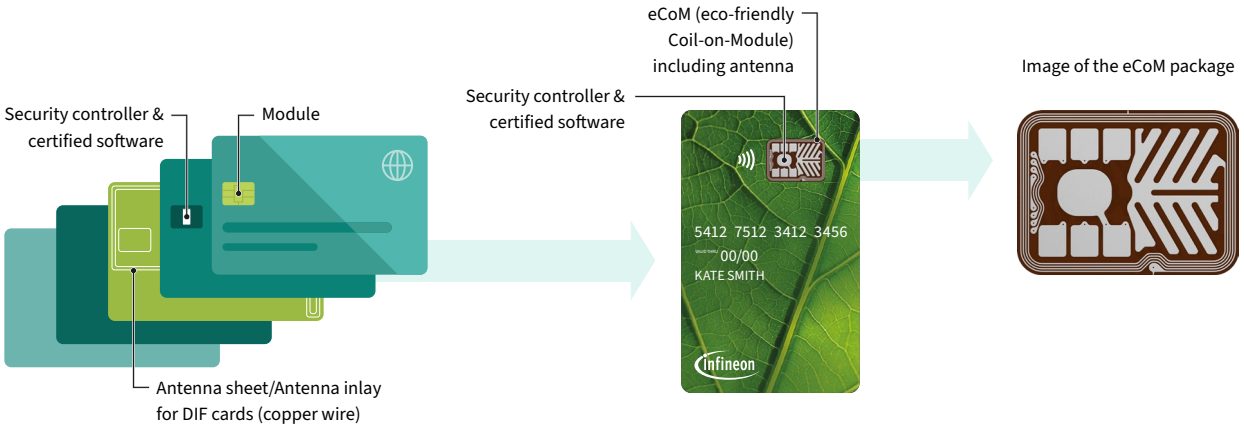
Additionally, eCoM stands out as the industry's first payment solution allowing more sustainable payment card bodies that can be made from one material only, including locally sourced, biodegradable alternatives to plastics. One single materi-al for the card body makes the recycling process much easier than multi-material designs.

Infineon is collaborating with major card manufacturers and payment schemes worldwide to ensure market readiness and wide acceptance of this new technology.

Key features

The innovative eCoM module

- Integrates the contactless anten-na in the module
- Allows recyclable materials and full recycling for payment cards
- Can reduce CO_2 emissions for the electrical components in pay-ment cards (module and anten-na) by more than 60%
- Enables innovative designs based on new materials (wood, recycled PVC, ceramic, metal, etc.)
- Offers proven contactless per-formance comparable to that of wearable devices
- Enhances the user experience with tap-to-mobile use cases



Key benefits

Simplified, sustainable sourcing and logistics
- Improved CO_2 footprint already established by our standard CoM relative to other direct-connect modules
- eCoM enables an additional major CO_2 footprint saving of around 60% compared with the standard CoM

Fully recyclable payment card bodies
- eCoM integrates the contactless antenna, so there is no need to embed a separate copper wire antenna
- Card bodies can be recycled much more easily (than standard payment cards)

Innovative card design
- The new design concept for dual-interface cards featuring eCoM has clear sustainability advantages, including ease of recycling and major CO_2 emissions reductions for payment cards



Recycling process is much easier!



Dual-interface card with eCoM

Ordering information

	Delivery form	Description	SP number
1	Bare tape	Tape with module only (no chip inside)	SP006037239
2	White sample cards	White cards with eCoM and SLU26PDL360K9	SP006025189
3	SLC26PDA360K9	Volume Sales Code (no NRG)	SP006132258
4	SLC26PDL360K9	Volume Sales Code (NRG)	SP006132270

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