## A future-proof solution for flexible, cellular connectivity

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Connected objects require optimized global connectivity so that they can simplify production and logistics for Original Equipment Manufacturers (OEMs). When designing connected objects and choosing a cellular connectivity solution, companies need to consider logistical, industrial and technical challenges.

Avnet Silica and IDEMIA are introducing a turnkey plug-andplay solution for flexible cellular connectivity to empower your connected objects. This future-proof solution is a combination of a product and services:

- An eUICC (Embedded Universal Integrated Circuit Card) manufactured by IDEMIA
- An initial pre-paid cellular connectivity allowance offered by Vodafone or Arkessa
- Remote management of connectivity services

#### BENEFITS

#### Connectivity as a service

Throughout the life of a device, the owner might need to change connectivity providers based on economic reasons, quality of service criteria or geographic considerations.

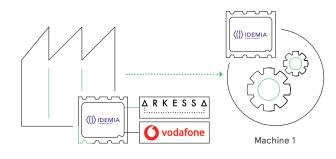
#### **Until now**

Switching operators means changing SIM cards manually and one by one for all the connected objects deployed in the field. The costs for this are too high in comparison to the potential savings in connectivity fees. As a result, a lot of devices are locked for life with the operator initially providing the SIM card.

#### **Going forward**

#### The eUICC allows flexible connectivity

This new generation of SIM cards makes it possible to change the mobile network subscription over the air thanks to a service platform compliant with the latest GSMA standards. The service platform manages eUICC subscriptions of the fleet of devices in an SaaS (Software as a Service) mode. A secure database, linked to the platform, delivers status information in real-time about all connected devices deployed in the field, such as which profile is loaded or if the status is active or not.



#### THE eUICC IN A NUTSHELL

- Enables cellular connectivity just like a classic SIM
- Remotely reprogrammable, enabling management of your connectivity subscription
- Able to host several subscriptions on the same chip

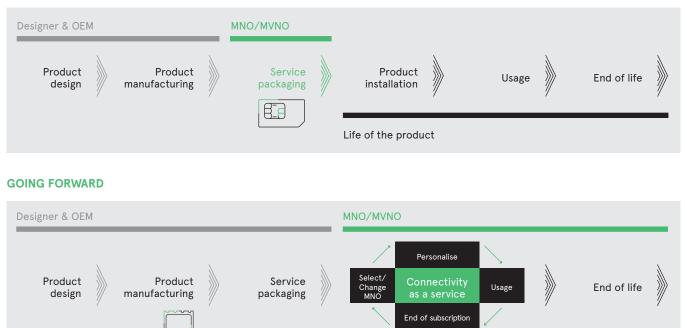




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### CONNECTED OBJECT LIFECYCLE & CONNECTIVITY AS A SERVICE

#### UNTIL NOW



Life of the product

#### A future-proof bundle and business model

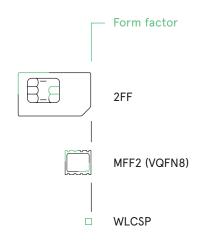
Our bundle offering includes initial connectivity, provided either by Vodafone or by Arkessa, making it possible to perform production test procedures (eUICC administration, factory test and data-link test between each device and the cloud server).

#### Modem compatibility

The eUICC has exactly the same electrical interfaces to a modem (2G/3G/4G/LTE-M) as a classically slotted SIM card (2FF, 3FF).

#### **GSMA** compliance

IDEMIA's eUICC and remote SIM provisioning are GSMA 3.2-compliant and therefore fully interoperable, yielding a truly open and future-proof solution.



#### **AVNET SILICA KEY BENEFITS**

#### LATE PRODUCT PERSONALIZATION

The supply chain is streamlined thanks to the drastic reduction of the required number of SIM product variants.

#### • Until now

When an OEM produces connected objects for several customers or geographies, production has to be manually differentiated in the factory, with the SIM cards corresponding to the final destination. This increases the number of product references, builds up stock and makes logistics more expensive.

#### Going forward

#### The eUICC allows lower logistics costs

Since connectivity is decoupled from the physical component, it is possible to implement a single eUICC at production. The final operating connectivity is loaded on it later in the field "as a service," simplifying logistics and greatly reducing manufacturing costs.

#### AN OPEN GSMA 3.2 STANDARD SERVICE

Since our service is GSMA 3.2 compliant, it is fully interoperable with competitive alternatives, and our customers are free to transfer their operations away from Avnet Silica at any time without penalties.

#### **OPTIMIZING CONNECTIVITY COSTS**

Enabling OEMs and their customers to swap operator anytime, anywhere and on any device in the field gives them more power when negotiating with cellular carriers.

#### • Until now

When OEMs and service providers subscribe to data plans with carriers, they have to manually fit a SIM card into their connected devices. Once deployed, these devices are expensive to service manually, which locks the initial cellular carriers for life into the devices, regardless of how good or bad the carrier-customer relationship evolves commercially in time.

#### Going forward

### The eUICC allows remote cellular carrier swap and provisioning

Since connectivity is decoupled from the physical component, Avnet Silica offers the service to remotely download new carriers into already deployed devices. Not only will customers be able to negotiate cellular tariffs and services for the devices they are deploying, but also leveraging the fleets of already deployed products which will be serviced all the same. Avnet Silica being fully independent from the cellular operators, and not being a cellular carrier itself, is fully legitimate to operate such a service.

#### **TEST THE SOLUTION**

#### AVNET eUICC TEST-PACK

#### Features:

- 4x eUICC in 2FF format preloaded each with a Vodafone and an Arkessa profile and 2x50MB of connectivity for Europe 28
- 2x eUICC in MFF2 format preloaded each with a Vodafone and an Arkessa profile and 2x50MB of connectivity for Europe 28
- Free test accounts with Arkessa and Vodafone
- Free swap services by Avnet avnet-silica.com/eUICC-testpack



Part number: ARKVDF50MBPACK

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