

## Selecting the right SIM hardware and SIM functions for your next cellular IoT design

Cellular connectivity can enrich a wide range of IoT use cases. The right choice of SIM hardware (form factor) and its Operating System's (OS) functionality can ensure your device's cellular capability is fitting. Identifying your device's use case and the deployment environment will clarify its associated cellular and security needs over its entire life in service. This in turn ensures future proofing and avoids early obsolescence.

But it's a complex landscape and you may need to compromise. However reasoned choices will lead to the best possible level of simplicity, supportability, efficiency, flexibility and security needed for your cellular device operation and its in-life management.

## Are any of the following a design consideration / factors? Minimal device size Restrictive component space Include a SIM tray into your Homeotic sealing circuit design and leverage NO Positioned in hard to access or remote locations traditional removeable SIM technology. Remotely managed connectivity provider migration Extended life in service (10 – 20 years) Enhanced durability for harsh environment operation Installed in unattended or insecure locations YES **Specify embedded SIM** hardware, MFF2 or WSCSP, which will realize: Reduction in hardware size NO Increased durability Do you also need to achieve any of the following: Physical security Reduced hardware costs Conserve power? Further reduce your device's hardware footprint? Rationalize your Bill of Material (BOM) cost? Remove SIM hardware logistics? YES Specify an integrated SIM (iSIM) that offers: The embedded or integrated SIM cannot be removed once Consumes no dedicated circuit board footprint introduced. Eliminates the discrete SIM component cost Will the same cellular network Lessens power consumption through optimization provider deliver its connectivity Flexible subscription deployment models for the life of the device? YES NO You'll need to consider a Remotely Provisionable SIM OS which offers support to allow for the delivery of network providers' You will need to find a profiles over the air from centralized certified platforms. connectivity provider that will be able to support your SIM choice and service in your target deployment region or location. Currently the management of such profiles can be The device will allow for local conducted either from the certified remote platform (M2M / push scenarios) or locally by a user from the device management. (consumer / pull scenarios). Your SIM will need to employ a GSMA certified Consumer RSP The device will need centralized remote management. OS in your device. If you plan to offer connectivity management for your devices, Your SIM will need to employ a GSMA certified M2M RSP OS you'll also need to select a GSMA in your device.

accredited <u>RSP service</u> (remote management platform) provider.