CF3 Flexible Form Factor: Next Generation Embedded Modules

Common across product generations
Flexible to support any wireless technology
Form that scales between module families
Factor with defined footprints and pin-outs

Since launching the first cellular embedded module in 1997, we've learned three things that matter most to our customers:

1. Compact size is required for many new IoT applications
2. Common footprints and consistent software interfaces simplify migration between technologies
3. Connectorized and solder-down options help scale manufacturing

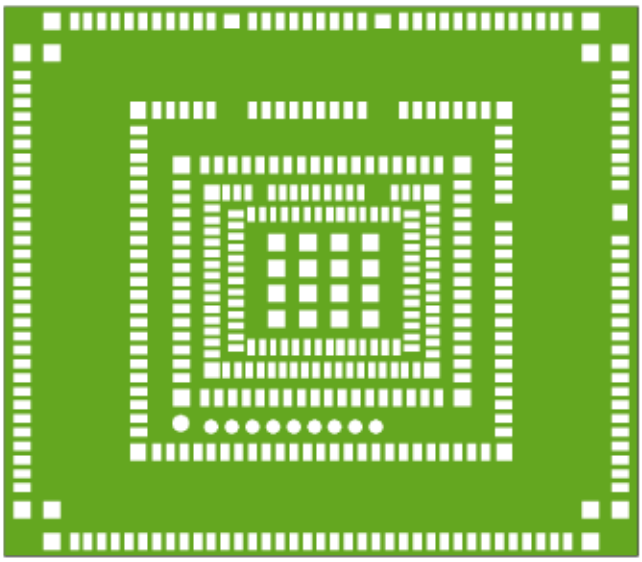
No matter what wireless technology you start with (2G, 3G, 4G, LPWA, Wi-Fi, Bluetooth), your CF3® investment is protected, lowering your total cost of ownership and giving you more variation possibilities in future product designs.

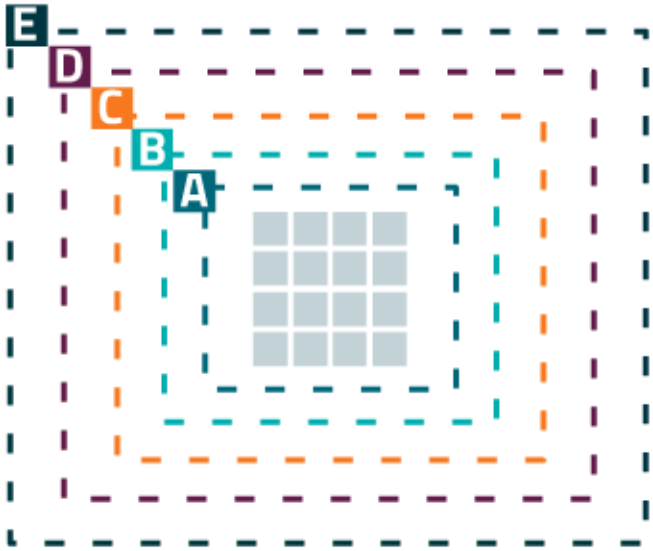
White paper: Avoid Expensive Redesigns by Choosing Scalable Components

Learn how to build a solid product platform that’s also easy to modify when you need to.

Download the white paper

CF3® Size



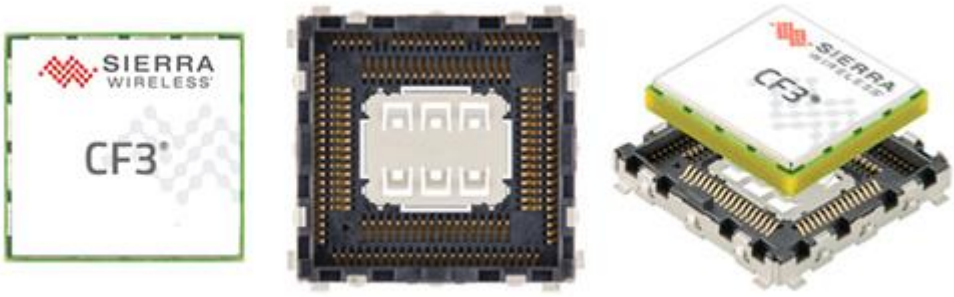


Module sizes enable new applications for IoT

The CF3® standard defines 5 rings to support form factors varying from extra-small 9.5mm x 11.5mm to extra-large 40mm x 40mm. The different sizes enable modules to further integrate various technologies on a single design and provide flexibility for supporting any number of cellular bands and frequencies.

The smaller size options are ideal for wearables and sensor applications using LPWA, Wi-Fi, and Bluetooth technologies. The larger sizes are ideal for more complex automotive modules with additional feature and band requirements.

CF3® Socket



Connectorized and solder-down options help scale manufacturing

The CF3® design recommends a common socket available for all modules of the same form factor to simplify prototyping and accommodate a build-to-order manufacturing process. The innovative snap-in socket uses the same board space as a solder-down module to facilitate mass production manufacturing in the future.