



FAST TRACKING 5G FWA TO THE NEXT BILLION CONNECTIONS

GET STARTED

Fast tracking 5G FWA to the next billion connections

"Bringing down the total cost of 5G FWA CPE is integral to 5G broadband adoption, scale and return on investment for all stakeholders in this price sensitive segment."

- Neil Shah, VP of Research at Counterpoint Technology and Research.

An opportunity for Customer Premise Equipment (CPE)

Fixed Wireless Access (FWA) represents the biggest opportunity after mobile broadband in 5G Monetization. As one of the largest 5G use-cases, Kigen and our ecosystem is driving ways to support innovation needed for energy-efficient and affordable customer premise equipment (CPE) as attention shifts to momentum and profitability. The benefits go beyond FWA, extending 5G opportunities for businesses to better experience with Point of Sale (POS) terminals, smart metering, and logistics. The key to adoption for 5G lies where the work of leading OEMs, like MeiG a global leading supplier of cellular solutions, begins.

FWA CPE opportunities

Fixed Wireless Access represents a cumulative revenue opportunity of USD 100 billion from 2020 to 2030. Estimated service provider revenues from FWA worldwide of USD 20 billion in 2022 are projected to reach USD 60 billion by 2023, a CAGR of 16 percent. 5G FWA has arrived in populous countries such as India, Mexico, Nigeria, the Philippines, and South Africa. As such, this segment is looking for ever miniaturized, diversified and affordable CPE form factors within the available indoor, outdoor, portable, and battery-operated devices.



In partnership with



About the CPE solution

Kigen and Tongxin Microelectronics Co. Ltd. (TMC) have joined forces to deliver the first-ever simple, global, secure, and commercial GSMA-certified consumer eSIM solution to empower OEM innovation to address the burgeoning demand for CPE products in the USD 100 to USD 300 range.

"At a glance, this joint solution is enabled by Kigen Consumer eSIM OS, the world's most compact size eSIM OS TMC THD89 series eSIM chipset, available as a smaller WLCSP Package Kigen Remote SIM Provisioning Platform"

Benefits

Kigen's consumer eUICC OS is the world's smallest code size GSMA-compliant software stake for eSIMs addressing consumer eSIM requirements. By using Kigen eUICC OS, manufacturers can take advantage of Remote SIM Provisioning (RSP) functionality into leading Embedded Subscriber Identity Module (eSIM) chips, as those from TMC.

Kigen consumer eUICC OS is able to support up to 10 operator profiles or up to 90 applets. Even on memory constrained TDH89-512 eSIM secure chipset variant, typically 1.5x less than other chipsets in this space, up to 5 profiles can be supported. A compact chipset to begin with, TMC's THD89 eSIM chipset is available as a smaller WCLSP package. TMC's GSMA SAS-UP certified secure production is enabled for wafer personalization for optimized throughput and costs.

Technical features

- ◀ Secure Kigen Consumer eUICC OS compliant to specifications from GSMA, 3GPP, ETSI, Trusted Connectivity Alliance and Java Card
- ◀ Supports EAP-SIM and EAP-AKA Authentication Protocols
- ◀ Supports IP authentication using SIP, MIP and high packet rate data
- ◀ High security level CC EAL6+
- ◀ GSMA certified SAS-UP and SAS-SM suppliers
- ◀ Successfully deployed in end-products addressing Point of Sale, Smart Metering and Logistics by lead OEM customers
- ◀ Supports chip level personalization.



Premise owner added value

This joint solution is focused to offer OEMs ways to offer improved quality of experience to IT, Retail and Store chain management segments which also can be extended to Point of Sales, remote monitoring and tracking applications.

- < **Easy installation:** Simple field setup workflow to onboard new devices with profile download via an accompanying app.
- < **CPE management:** Better IT or admin experience through digital profile downloads for activation or switching profiles.
- < **Driving innovation:** OEMs can focus on value-added services through streamlined fleet management.
- < **Fleet management:** Joint solution supports scalable in-store or moving fleet operations and management.

This joint solution is focused to offer OEMs ways to offer improved quality of experience to IT, Retail and Store chain management segments which also can be extended to Point of Sales, remote monitoring and tracking applications.

CPE: Gateway to secure data

Higher volumes of 5G FWA in large high-growth countries have the potential to drive economies of scale for the overall 5G FWA ecosystem, spurred by the positive impact affordable CPE can bring.

FWA data traffic is projected to grow by almost five times. FWA data traffic represented 21 percent of global mobile network data traffic by the end of 2022 and is projected to grow more than 5 times to reach almost 130 EB in 2028.

FWA profitability is affected by CPE choices determining premises and network costs as well as revenue drivers. Time to Market and lifetime data costs are both revenue drivers that allow OEMs to be well positioned to serve the more than 1 billion connections that currently lack fast and reliable connectivity, bridging the digital divide and empowering consumers and businesses.



Working together with you

Capture this high growth 5G monetization FWA opportunity with your CPE device. Find out more how you can benefit from this world-leading commercial solution, available now.

For more information, visit kigen.com/cpe and send in your sales enquiry.

Follow our **#FutureofSIM** updates and news online at kigen.com or on social media, [@Kigen_Ltd](https://twitter.com/KigenLtd) on Twitter and [@Kigen](https://www.linkedin.com/company/kigen) on LinkedIn.



All brand names or product names are the property of their respective holders. Neither the whole nor any part of the information contained in, or the product described in, this document may be adapted or reproduced in any material form except with the prior written permission of the copyright holder. The product described in this document is subject to continuous developments and improvements. All particulars of the product and its use contained in this document are given in good faith. All warranties implied or expressed, including but not limited to implied warranties of satisfactory quality or fitness for purpose are excluded. This document is intended only to provide information to the reader about the product. To the extent permitted by local laws Kigen shall not be liable for any loss or damage arising from the use of any information in this document or any error or omission in such information.