

## Key Features

- › **Ultra-Fast 5G Connectivity**
- › 5G NR FR1 data only M.2 module based on 3GPP Release 17 for ultra low latency, high throughput applications.
- › Supports **SA/NSA operation** with a single global SKU for **worldwide 5G and LTE coverage**.
- › Downlink rates **up to 4.9 Gbps** and uplink up to 0.55 Gbps with 4x4 DL / 2x2 UL MIMO and carrier aggregation.

## Compact M.2 Form Factor, Easy Integration

- › Standard **30x52 mm M.2 (Key B)** card for straightforward integration into OEM and industrial platforms.
- › **USB 3.1 Gen 2** or **PCIe** data interface options for flexible host connectivity.
- › **Dual SIM** interfaces for multi network designs and global deployments.

## Industrial Grade & Global Ready

- › Designed for industrial environments with an operating temperature range from **-40 °C to +85 °C**.
- › **Wide 5G and LTE band support for Europe, North America, and Asia** in a single module.
- › Based on **Qualcomm SDX720** for long term performance and a future proof 5G feature set.

## Reliability, Security & Western Sourcing

- › **German engineered 5G M.2 module** with secure, transparent supply chain for industrial and infrastructure projects.
- › **Compliance** with major regulatory and carrier approvals (**GCF, PTCRB, RED, FCC, and key MNOs**).
- › **Ideal building block** for industrial PCs, gateways, transportation, and IoT devices needing **trusted 5G connectivity**

## Related Products

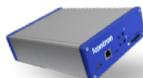
**5G R17 Gateway**  
KCell 5G Industrial Gateway



**KDemo-16-NGeCall**  
5G Automotive Solutions



**KDemo-16-NGeCall**  
Ruggedized eCall Demonstrator



## Kontron AG

Industriezeile 35  
A-4020 Linz / Austria  
+43 732 7664 – 0  
contact@kontron.com  
[www.kontron.com](http://www.kontron.com)



5G R17 M.2-Key B

# 5G Broadband Modem

High-Speed, Secure and Robust Connectivity  
for Industrial and Mobile Applications



# 5G Broadband Modem

The **Kontron IB17M W 5G Industrial M.2 Module** is a compact, high-performance cellular data card designed for mission-critical industrial and mobile use cases.

With 5G NR data rates **up to 4.9 Gbps** downlink and **550 Mbps uplink**, and USB 3.1/PCIe interfaces, IB17M W ensures fast, stable, and secure connectivity between field devices, control systems, and cloud applications



## Security by Design

### Qualcomm SDX720 platform with industrial hardening:

- › Secure Boot and hardware root-of-trust for trusted execution.
- › Support for secure element integration and firmware signing.
- › Compliance with 3GPP security standards and RED CyberSecurity Act.
- › Regular vulnerability scans and accelerated firmware updates via Kontron support.

**Fast, stable and secure connectivity** between field devices, control systems, and cloud applications.

### Overview

#### 5G NR FR1 standalone (SA) and nonstandalone (NSA)

- › Sub-6 3GPP Release 17 200MHz, 3xCA, 20L LTE
- › E-UTRAN new radio -dual connectivity (EN-DC) support
- › 4x4 DL MIMO, 2x2 UL MIMO
- › LTE carrier aggregation (CA) support
- › 5G NR SA downlink carrier aggregation (CA)
- › Qualcomm SDX 72-0 platform
- › 2 SIM interfaces
- › Dimensions : 30 x 52 x 2.3mm (single sided)
- › Supply voltage: Nominal 3.3V (±5%)
- › Operation temperature: -40°C to +85°C

### General Features

#### Data-only Bandwidth:

- NSA: Up to 4.9Gbps DL, up to 0.55Gbps UL
- SA: Up to 4.1Gbps DL, up to 0.90Gbps UL 2XCA

#### Memory industrial grade:

4Gbit RAM and 4Gbit FLASH

### Interfaces

#### 4 antenna ports:

- Cellular: 2 x TRX , 4 x RX
- GNSS: Integrated (optional)
- Data interface: USB 3.1 Gen2/ PCIe

### RF Bands

#### 5G:

n1, n2, n3, n5, n7, n8, n25, n28, n29(DL), n30, n38, n40, n41, n48, n66, n70, n71, n75(DL), n77, n78, n79

#### 4G:

B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29(DL), B30, B32(DL), B34, B38, B39, B40, B41, B42, B43, B46(DL), B48, B66, B67(DL), B68, B70, B71

### Regulatory and Approvals

**RoHS** mandates compliant

**WEEE** compliant

**GCF, PTCRB, RED, FCC**

**Regulatory and MNO** approvals-US (AT&T)