

# BAE Systems Open Modular Development Kit

The BAE Systems Open Modular Development Kit (OMDK) is an out of the box solution that enables customers to deploy, develop, test and analyse RF Software Defined Radio (SDR) applications. The solution includes BAE Systems' C100 SDR and RF front end supporting UK ISM bands: 868MHz, 2.4GHz and 5.8GHz TX and RX functionality. The C100 is an Open Standards aligned, multi-gigahertz, multi-channel, rugged 3U, 1" conduction cooled OpenVPX (VITA 65.0) SDR card that supports Open Component Portability Infrastructure (OpenCPI) applications. The OMDK comes with optional demonstration SDR applications and test stimulus.

## The value of SDRs

SDRs are a key component in the Modular Open Systems Approach (MOSA) adopted by the US DoD and the UK MoD's Standards for Integrated C5ISR/EW Systems (STICS) approach.

SDRs are software defined, meaning they can be reprogrammed and reconfigured to support a wide range of RF missions including:

- **Electronic Countermeasures** – degradation, denial or deception of adversary RF systems
- **Precision Electronic Attack** – targeted effects with optimised transmit power and minimal or no impact on adjacent systems
- **Electromagnetic Support Measures** – threat warning and recognition systems
- **RF over Cyber** – exploiting vulnerabilities in adversary systems or enterprises
- **SIGINT / COMINT** – processing information contained within signals
- **RF Emitter Identification and Geolocation** – enabling informed follow-on decisions
- **Secure Resilient Communications** – bespoke, secure waveforms;
- **Alternative Position Navigation and Timing (APNT)** – operation within denied environments

The Open Modular Development Kit is a purpose-built laboratory environment for customers to design, launch, verify and analyse SDR Applications – the bedrock of sovereign development. Once refined and validated in this controlled setting, solutions can be ported to C100s or any OpenCPI-compliant and compatible SDR platform for real-world deployment.



## Why BAE Systems?

- We have been developing and delivering SDRs and applications for over 30 years, fulfilling a range of different missions within the UK and abroad.
- We have supplied the Open Modular Development Kit to several cyber divisions within the armed forces of prominent European nations.
- We continue to invest in open hardware and open software technology and C100 roadmap.

### Reference System features:

- There are several configuration options available when ordering an Open Modular Development Kit.
- Customers can select ready-made configurations that provide instant, out-of-the-box demonstration SDR Applications that showcase Cyber over RF capabilities.
- Configuration options include the C100 SDR, a 1 slot OpenVPX laboratory development chassis, Tactical Assault Kit (TAK) User Interface, ancillary H/W and a selection of drone-based demonstration Applications.
- We provide an OpenCPI support package (OSP) for the C100.
- Customers can order individual C100 SDRs, or TAK + plugins. TAK customisation is available.
- User Guides are included.
- We provide optional support and joint research and development agreements depending on customers' needs and interests. We always collaborate with the customer to deliver the required capability.

Enhance your workforce with BAE Systems' Open Standards/Cyber over RF Academy – a suite of customisable training modules that builds your team's expertise and empowers them to create their own sovereign SDR applications, perfectly complementing the Open Modular Development Kit.

BAE Systems, Surrey Research Park,  
Guildford, Surrey, GU2 7RQ, UK

E: [learn@baesystems.com](mailto:learn@baesystems.com)

W: [baesystems.com/digital](https://baesystems.com/digital)

 [linkedin.com/company/baesystemsdigital](https://linkedin.com/company/baesystemsdigital)  
 @BAESystemsDigi

Copyright © BAE Systems plc 2026. All rights reserved.

BAE SYSTEMS, the BAE SYSTEMS Logo and the product names referenced herein are trademarks of BAE Systems plc. BAE Systems Applied Intelligence Limited registered in England & Wales (No.1337451) with its registered office at Surrey Research Park, Guildford, England, GU2 7RQ. No part of this document may be copied, reproduced, adapted or redistributed in any form or by any means without the express prior written consent of BAE Systems Digital Intelligence.