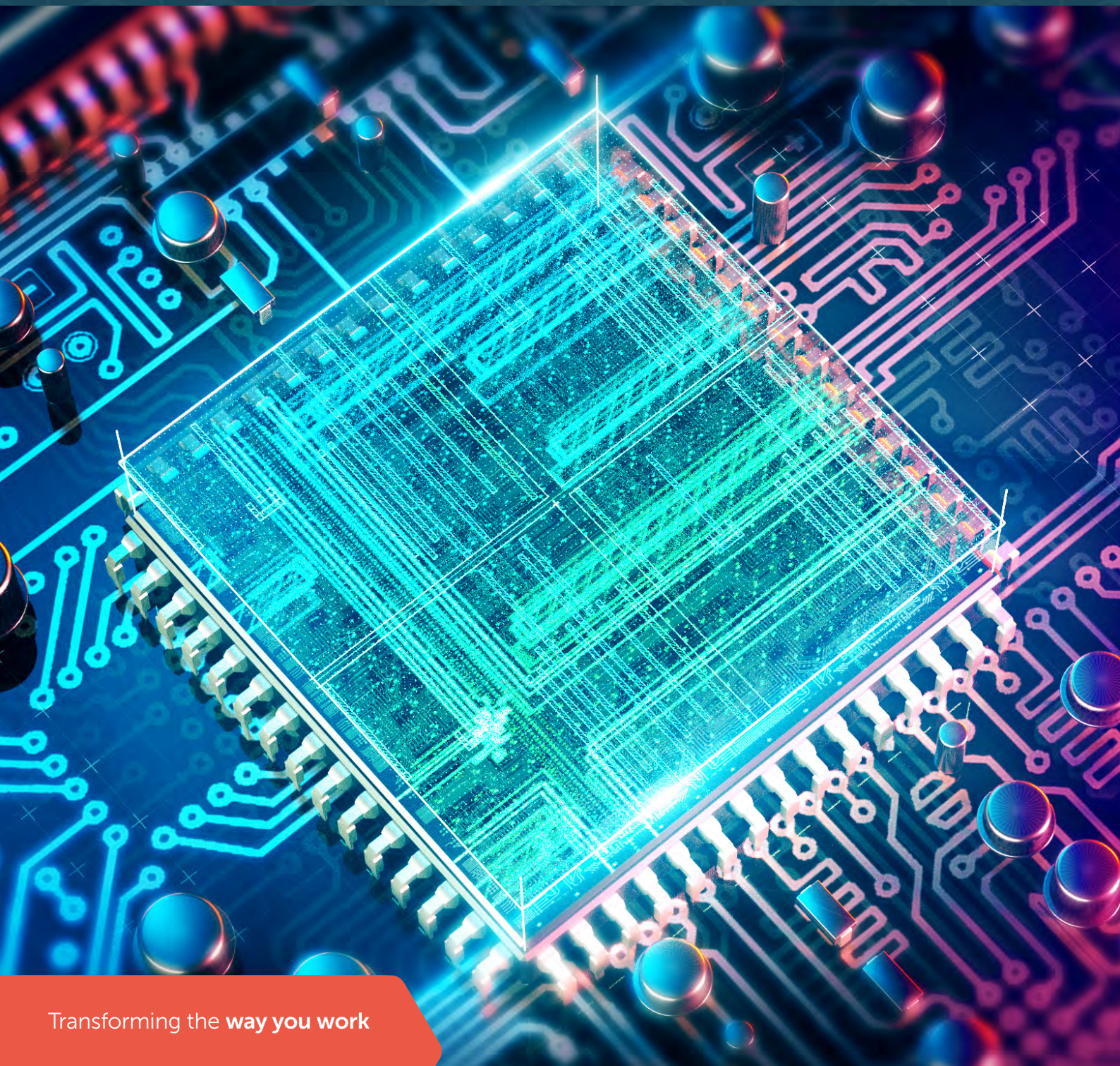


CIVICA

WanStaX G.fast

The complete FTTdp
G.fast DPU portfolio



Transforming the way you work

Civica WanStaX is a portfolio of licensable software components designed to allow the telecommunications industry to harness the full potential of Sckipio’s G.fast chip set and Microsemi’s WinPath network processors.

WanStaX G.fast is a key offering within the WanStaX portfolio, it provides all of the capability required by network equipment manufacturers to support the functional requirements of an FTTdp G.fast DPU.

Integrating Microsemi’s WinPath network processors with the latest Sckipio chipset, WanStaX G.fast offers customers everything they need to successfully deploy the second generation of ultra-high speed broadband solutions. The solution is designed to run on the Sckipio reference boards including the DP3016 and DP2. Utilising the Microsemi WP3/WP4 NPU, it provides the power and flexibility required by G.fast DPUs.

The leader in G.fast

Employing Sckipio’s next generation G.fast DPU chipset, WanStaX customers can benefit from the highest performing G.fast technology in the broadband market, which is twice the speed of competing solutions. It also supports full 212a bonding.

Why Civica;



We offer accelerated solution delivery due to our extensive board bring-up experience and our long-term partnerships with Sckipio and Microsemi.



Our experienced team work closely with customers throughout project delivery to ensure the successful implementation of WanStaX G.fast.



With a strong track record as one of the fastest growing providers of our kind, we work to transform services and improve lives for our customers.



Our telecoms division is a trusted enabler of next generation networks, with an expert services team that have been developing solutions for over 15 years.



Civica provide a wide range of business-critical software, digital solutions and managed services, making us a leading partner for customers.



With more than 4,500 employees, we streamline services for 100 million people and businesses across 10 countries worldwide.

WanStaX G.fast enables;

- ▶ Full standards support
- ▶ On chip scalable vectoring control
- ▶ Flexible bonding support across any port
- ▶ Full G.fast performance
- ▶ Lower costs than FTTH
- ▶ Low power consumption
- ▶ Time and synchronisation control
- ▶ Multiple management and control options.

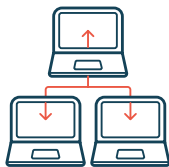
Benefits of WanStaX G.fast

G.fast delivers a range of benefits for network equipment manufacturers, including;



Enterprise ready software solution

We provide a turnkey, end-to-end software solution that provides customers all the software application elements required to deliver a product in today’s enterprise networks. Triple play services for voice, video and data are enabled with a ready-made CLI configuration interface. While support for various network management solutions are also available.



Full integrated with latest Sckipio SDK and WinPath processor family

Our established partnership with Microsemi, the WinPath Network Processor vendor and Sckipio the world leading G.fast chip manufacturer ensures the most efficient and effective solutions using the latest chipsets and drivers.



Board bring-up services

We have extensive experience in board bring-up, which is critical to successful product delivery. Our fully functional in-house lab facility helps fast-track hardware troubleshooting along with support services for Linux distribution.



Complete featured evaluation application available for Sckipio EVMs

Our customers can leverage a fully functional evaluation DPU that allows extensive G.fast feature testing, verification and network integration testing. In addition, we also offer licences to allow use of this application for lab trials.



Dedicated support services

We provide a dedicated line of support services for our customers including a web based support portal with UK and Ireland based support engineers. This service can be provided onsite or remotely, with telephone and debugging support available. This support network helps to minimise risk and ensure successful project completion. We also provide bespoke training to accelerate integration efforts and improve time to market for those that require it.



Tailor-made support

We also offer consultancy to customers who require a more tailored solution. Our expert team can assist with unique customisations to enhance product functionality that enables product differentiation.

Key capabilities

WanStaX G.fast offers the following key capabilities which will help customers to differentiate their solution;

1 EFM Bonding

- ▶ Utilising the WinPath flexibility, WanStaX is able to provide bonding on both the DPU and the CPE, giving up to 4Gbps on a bonded pair of G.fast lines. Bonding is implemented in the network processor which means any pair can be bonded independent of the DFE.

2 NETCONF and RESTCONF management support

- ▶ NETCONF and RESTCONF support including the BBF YANG model to support latest generation of management entities.

3 SDN ready with OpenFlow support

- ▶ Native OpenFlow pipeline is supported. This enables a seamless migration path to SDN.
- ▶ OpenFlow extensions and customisations are also possible, such as Carrier Ethernet capabilities like OAM and Protection Switching.

4 Comprehensive and extensible VLAN forwarding models supported

- ▶ Complete flexibility offering in the VLAN modelling to allow customers to support a range of tagging options depending on market requirements.

5 Hardware abstraction layer delivers expedited HW migration solutions

- ▶ With seamless hardware integration, the WanStaX G.fast application framework can be supported on multiple HW platforms, offering an accelerated integration strategy, e.g. different generations of Sckipio or WinPath chipsets.
- ▶ Ability to support other alternative network processors for customers with other requirements.

WanStaX software architecture

WanStaX offers multiple management platforms such as SNMP and NetConf. The core G.fast DPU capabilities are modelled in the G.fast DPU Data Model using the common WanStaX application framework block. This core framework implements the key G.fast services, VLAN forwarding, IGMP, DHCP etc. and runs over a hardware abstraction layer which supports the Sckipio G.fast chipset and Microsemi WinPath family of Network Processors.



Technical specification

The principal specifications of the Civica WanStaX G.fast package include:

Ethernet and VLAN specification	802.1q (2014) 802.1ad QinQ 802.3ad LAG Triple-Play services Multicast (IGMP snooping)
G.fast management	SNMP NETCONF BBF YANG model RESTCONF
SDN	OpenFlow 1.3.4
OAM	802.1ag CFM 802.3ah Link OAM Y.1731
Security services	Access Control Lists White and Black list support for L3 and L4 header fields MAC Spoofing support
QoS	Multiple Scheduling and Shaping models supported including MEF 10.2 8 queues as standard per EVC Remarking PCP, DSCP Traffic Policing per queue, Color Aware/Blind.
Clock Synchronisation	SyncE (ITU G.8261, ITU G.8262, ITU G.8264) IEEE 1588 v2 (OC,BC and TC modes) ITU G.8265.1 Telecom Profile

The complete FTTdp G.fast
DPU portfolio

To find out more or to book
a demonstration please
call **+44 28 9072 5000**

or

email **telecoms@civica.co.uk**



Cert No. 663
ISO 9001
ISO 14001
OHSAS 18001



civica.com/telecoms



linkedin.com/company/civica

© Copyright Civica Group Limited 2018. All rights reserved.