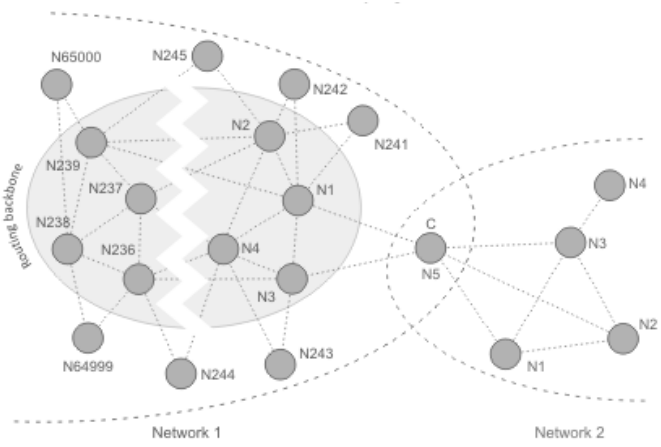
Development set for IQMESH

Brief User's Manual

IQMESH is an IQRF network topology with one Coordinator mastering the network and up to 65 000 end devices (Nodes). Up to 239 Nodes can be defined to create a structure (backbone) for background routing. Full network support is included in operating system built in transceiver modules.

This set contains selected combinations of IQRF devices optimized for typical network applications for advantageous price. It is intended to demonstrate IQMESH usage and enable to develop user's own applications. DDC kits are intended for demonstration of end nodes with I/Os, sensors and realys.

IQRF features are explained in IQRF examples including demonstrating an IQMESH (building a simple network, basics of bonding, discovery, timing, routing, power management, …).



To start as effectively as possible, follow next steps:

- Plug TR-modules into two DK-EVAL-04 kits and connect power-on jumpers. RF link is just established and wireless connection is indicated by LEDs. Red LED indicates every successful receipt and green LED means an unsuccessful one. RF range can be tested in this way.
- Application notes AN003 and AN004 describe all needed knowledge concerning installation and following steps.
- Go through all basic examples E00 to E10 to get familiar with individual IQRF features.
- Finally, the E11-IQMESH example should be applied to implement IQMESH demonstrating data collection from Nodes.
- Then, some network devices can be realized by gateways included in the set to exploit their additional features, performance and USB connectivity.
- GW-USB-04 is very suitable also as a programmer for RF (wireless) programming of TR modules.
- Training by IQRF manufacturer is available for further speeding-up.

For more information see IQRF OS Reference Guide, IQRF OS User's Guide for OS v3.00 and documentation for individual products .

Pack list

• TR-52BA	16 pcs	Transceiver module
• CK-USB-04	1 pc	Programmer/debugger
• DK-EVAL-04	15 pcs	Development kit
• GW-USB-04	2 pc	USB gateway
• DDC-IO-01	1 pc	I/O kit
• DDC-SE-01	1 pc	Sensor kit
• DDC-RE-01	1 pc	Relay kit
• MI-TY-A6-microUSB	1 pcs	Power supply
• DK-PWR-01	2 pcs	Power supply expansion board
• CABUSBABMICRO-100	1 pc	Micro USB cable 1 m
• CD DS-MESH-02	1 pc	CD with SW and documentation
• BRIQRF	PDF	IQRF Brochure
• \Accessories		
• MNMITYA6MICROUSB	PDF	Power supply user's guide
• MNDKPWR01	PDF	Power supply expansion board user's guide
• \Application Note		
• AN003	PDF	IQRF development tools - Installation guide
• AN005	PDF	IQRF Design Step by Step
• AN006	PDF	IQRF Application Examples
• AN008	ZIP	IQRF Firmware upgrade
• AN009	ZIP	IQRF Wireless upload
• \OS		
• MNIQRFOS300	PDF	IQRF OS User's guide
• MNRGIQRFOS300	PDF	IQRF OS Reference guide
• \Products		
• DSTR52B	PDF	TR-52B datasheet
• MNCKUSB04	PDF	CK-USB-04 user's guide
• MNDKEVAL04	PDF	DK-EVAL-04 user's guide
• MNGWUSB04	PDF	GW-USB-04 user's guide
• MNDDCIO01	PDF	DDC-IO-01 User's guide
• MNDDCSE01	PDF	DDC-SE-01 User's guide
• MNDDCRE01	PDF	DDC-RE-01 User's guide
• \SW		
• IQRF-Startup-Package	EXE	All-in-one bundle to start with IQRF. Selfextracting.
• IQRF-Startup-Package	ZIP	All-in-one bundle to start with IQRF

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