

**TASKING®**

# IC7 BLUEBOX DEBUGGERS

THE NEXT GENERATION OF BLUEBOX DEBUGGERS



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### OVERVIEW

The iC7 BlueBox Debugger family offers compatibility with IDEs including winIDEA, Eclipse, and Visual Studio Code, along with features such as unit testing with testIDEA, data acquisition and visualization via daqIDEA, flash programming capabilities, and external, and on-chip memory programming.

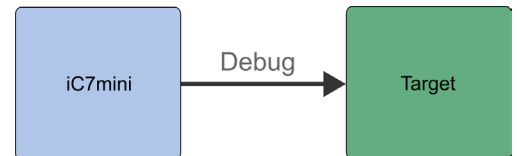
Its enhanced debug and trace performance in comparison with previous BlueBox generation, coupled with a universal approach for debugging multiple microcontroller architectures, ensures swift and efficient debugging processes.

With winIDEA SDK available for all popular programming languages and smooth integration into Continuous Integration (CI) workflows, the iC7 BlueBox Debugger family promotes automation and streamlines development processes. Additionally, the BlueBox family is equipped for standalone CI operations and boasts improved remote operation capabilities, enhancing its flexibility and usability in various development environments.

Its robust hardware design incorporates improved tolerance for poor ECU designs and electrical disturbances, ensuring reliable performance even in challenging conditions, and features a USB PD power supply for convenient and user-friendly operation.

### iC7mini

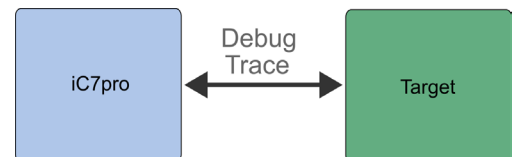
- High-performance access to all debug features of the target device
- Supports on-chip trace (buffers)
- USB and Ethernet connection to the host
- Compact, pocket-sized package



### iC7pro

Additional to iC7mini:

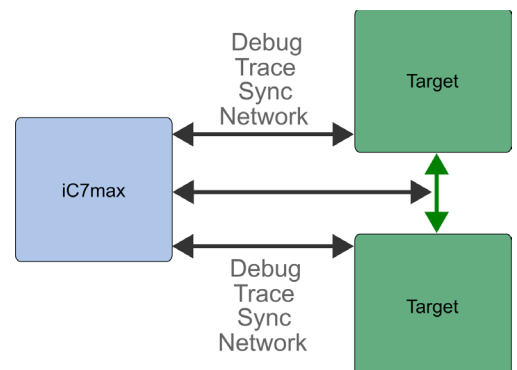
- Parallel trace
- High bandwidth on-chip-buffer trace pump
- High frequency sampling trace allows RTOS tracing even on devices without a trace port or on-chip-trace-buffer capability



### iC7max

Additional to iC7pro:

- Serial (Aurora) trace
- Up to 10m distance to target
- Multi-target support with low-latency run/stop synchronization
- Network trace, time-synchronized with target device trace



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### COMPARISON TABLE

	<b>iC7mini</b>	<b>iC7pro</b>	<b>iC7max</b>
Communication interfaces to PC	USB 3.0 10/100/1000 Ethernet	USB 3.0 10/100/1000 Ethernet	USB 3.0 10/100/1000 Ethernet
Size [L x V x H in mm]	113 x 113 x 45	170 x 170 x 45	170 x 170 x 45
Debugger distance to target [m]	0,3	0,3	10
Debug Performance [MHz]	up to 120*	up to 120*	up to 160**
Trace Support	On-Chip trace buffer  TriCore: MCDS and MiniMCDS through DAP  Arm: ETB, ETF, MTB through SWD	On-Chip trace buffer Parallel Trace Sampling Trace  Nexus and ETM (Parallel) DAP Streaming Arm CoreSight SWO RH850 LPD4 Software Trace	On-Chip trace buffer Parallel Trace HSSTP High-Speed Serial AURORA High-Speed Serial  Nexus and ETM (Parallel) DAP Streaming Arm CoreSight SWO RH850 LPD4 Software Trace AGBT/SGBT High-Speed Serial
Trace Bandwidth [MHz]	N/A	up to 500 in parallel mode up to 250 DDR	up to 500 in parallel mode up to 250 DDR up to 5 Gbps in serial mode*
Trace Buffer [GB]	N/A	up to 16	up to 32
Variable Target voltage	●	●	●
Autonomous data acquisition	●	●	●
Time-critical SoC management (LPM)	●	●	●
Target pin/power control	●	●	●
On-Chip trace	●	●	●
mDIO port	●	●	●
Galvanic isolation	●	●	●
HIL	●	●	●
mDIO port	●	●	●
DAP over CAN Physical Layer (DXCPL)	●	●	●
Sampling Trace		●	●
SoC Parallel Trace Streaming		●	●
Code/Data Trace, Function/OS Profiling, Coverage		●	●
Active Probes			●
SoC Trace High-Speed Trace Streaming			●
Multi SoC Debug and Trace			●

\*depending on a protocol and target design

\*\*via Active Probes

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	iC7mini	iC7pro	iC7max
Network Analysis via CAN/LIN Add-on module			•
Analog/Digital signal capture and control via ADIO Add-on module			•
CAN/LIN/SPI/Analog/Digital trace			•
CAN/LIN/Analog/Digital injection			•
Synchronous debug of multiple SoCs			•
External Watchdog Disable Pin (with Infineon AUTO 20-pin and Infineon AUTO 26-pin Adapters)			•
Supported Microcontroller Architecture	<ul style="list-style-type: none"> <li>• Infineon Aurix</li> <li>• Arm Cortex</li> <li>• RH850 Renesas</li> <li>• NXP/ST Power Architecture                             <ul style="list-style-type: none"> <li>• RISC-V</li> <li>• <a href="#">others</a></li> </ul> </li> </ul>		

### LICENSING

For additional information about iC7 BlueBox Debuggers licensing please contact us at [www.tasking.com/contact](http://www.tasking.com/contact).

### ADDITIONAL RESOURCES

- [iC7 BlueBox Hardware User Manuals](#)
- [Knowledge Base](#)
- [winIDEA SDK](#)