

# OBC-317 Platform Datasheet

January 2018



## Smart Android™ Powered On-Board Computer

powered by

**ANDROID**

Disclaimer: Micronet reserves the right to change product specifications without prior notice

## Introduction

The Micronet's OBC-317 is an Android On-Board-Computer. Based on the TREQ®-317 platform, with integrated GPS, cellular communication, WiFi, Bluetooth, and support for a variety of vehicle-bus and peripheral interfaces, OBC-317 is a flexible and cost-effective Telematics in-cab computer, ideal for a variety of Fleet Management solutions.

Powered by Android open platform, OBC-317 offers a comprehensive development environment for independent application programming and system integration. With robust architecture and cost-effective design it simplifies maintenance tasks, and enables extended product life.

*Designed to operate in a rough commercial automotive environment, including a wide range of temperatures, vibrations and shocks, the TREQ®-317 lowers the Total Cost of Ownership*

# OBC-317 Platform Key Features

Device Key Feature	Details
<b>Platform Core</b>	
<b>Operating System</b>	Google Android™ 4
<b>Application Development Environment</b>	<ul style="list-style-type: none"> <li>- Google Android™ ADT</li> <li>- JavaScript</li> </ul>
<b>Processor</b>	<ul style="list-style-type: none"> <li>- ARM Cortex™ - A8 Core</li> <li>- TI Omap 3715 1GHz</li> <li>- Graphics processing unit (GPU)</li> </ul>
<b>RAM</b>	512MB
<b>Flash</b>	512MB
<b>Memory Card Support</b>	<ul style="list-style-type: none"> <li>- Micro SD</li> <li>- SDIO interface</li> <li>- Up to 32GB</li> </ul>
<b>Audio CODEC</b>	<ul style="list-style-type: none"> <li>- Multi-channel</li> <li>- System audio support</li> </ul>
<b>Real Time Clock</b>	<ul style="list-style-type: none"> <li>- HW based</li> <li>- Device Wakeup alarm configuration capability</li> </ul>
<b>Watchdog</b>	<ul style="list-style-type: none"> <li>- SW based for application recovery</li> <li>- HW based for system recovery</li> </ul>
<b>Communication Interfaces</b>	
<b>RS232 Ports</b>	<ul style="list-style-type: none"> <li>- 1 X 5 Wire (TX, RX, RTS, CTS, GND), 300 - 115200 bps</li> <li>- 1 X 3 Wire (TX, RX, GND) 300 - 115200 bps</li> </ul>
<b>USB OTG Port</b>	<ul style="list-style-type: none"> <li>- USB 2.0</li> <li>- low, full and high speed</li> </ul>
<b>USB Host Port</b>	<ul style="list-style-type: none"> <li>- USB 2.0</li> <li>- low, full and high speed</li> <li>- 500mA</li> </ul>
<b>Wireless Interfaces</b>	
<b>Wireless LAN</b>	<ul style="list-style-type: none"> <li>- 802.11 b/g/n</li> <li>- Internal on-board antenna</li> </ul>
<b>Bluetooth</b> (combined with Wireless LAN option above)	<ul style="list-style-type: none"> <li>- Class 2</li> <li>- Data communication support</li> <li>- Internal on-board antenna</li> </ul>
<b>Peripherals Control</b>	
<b>Digital I/O</b>	<ul style="list-style-type: none"> <li>- 7 x Automotive inputs</li> <li>- 4 x Open collector outputs</li> </ul>
<b>Analog Inputs</b>	<ul style="list-style-type: none"> <li>- 1 Analog inputs</li> <li>- 0V – 30V</li> </ul>
<b>Accelerometer</b>	3 Axis
<b>Vehicle Diagnostic</b>	
<b>J1939</b>	1 x CANBus V2.0B
<b>J1708</b>	1 X SAE J1708

Device Key Feature	Details
<b>Cellular Communication options and GPS</b>	
<b>GSM 3.5G</b>	<ul style="list-style-type: none"> <li>- Data communication support</li> <li>- HSPA, UMTS, EDGE and GPRS</li> <li>- EUD-European and NAD-American bands</li> <li>- Micro SIM</li> <li>- External antenna connection</li> </ul>
<b>EV-DO</b>	<ul style="list-style-type: none"> <li>- Data communication support</li> <li>- CDMA 1xRTT, EV-DO</li> <li>- American bands</li> <li>- External antenna connection</li> </ul>
<b>4G LTE</b>	<ul style="list-style-type: none"> <li>- Data communication support</li> <li>- North American bands</li> <li>- External antenna connection</li> </ul>
<b>GPS</b>	<ul style="list-style-type: none"> <li>- High sensitivity, 50 channels, -160 dBm, NMEA 0183 output format</li> <li>- External (active) antenna connection</li> </ul>
<b>Power</b>	
<b>Input Power</b>	<ul style="list-style-type: none"> <li>- Direct vehicle battery connection (12V/24V)</li> <li>- ISO 7637 compliant</li> <li>- Super Capacitors for Data storage protection</li> </ul>
<b>Mechanical</b>	
<b>Vibration</b>	According to J1455
<b>Mechanical Shock</b>	According to J1455
<b>Environmental</b>	
<b>Temperature Range</b>	<ul style="list-style-type: none"> <li>- Operating: -4 °F to +158 °F (-20 °C to +70 °C) <ul style="list-style-type: none"> <li>o Optional Heater feature to support -22 °F to +158 °F (-30 °C to +70 °C)</li> </ul> </li> <li>- Storage: -22 °F to +176 °F (-30 °C to +80 °C)</li> </ul>
<b>Humidity</b>	95% ±5%RH, +40°C, non-condensing
<b>IP</b>	IP65
<b>RoHS</b>	Compliant
<b>Certifications</b>	
<b>Standard Compliance</b>	FCC, CE

## Platform Accessories - optional

Features	Details
<b>Peripheral Cables</b>	
<b>Main interface cable 44 pin</b>	Supporting all the platform interfaces
<b>External Antenna</b>	Combo SMA (Cellular + GPS)

## GSD™ Software Services

Micronet's GSD™ (Guardian System Design) is a cloud-based SaaS platform for managing mobile devices in the field.

GSD™ enables remote delta-based, over-the-air, firmware and application updates allowing customers to keep devices relevant anywhere, anytime. It features Mobile Device Management functionality, Remote-Control, and self-tests.

Administrators can proactively monitor and manage connected devices with a flexible web interface.

