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TREQ®-317
Platform Datasheet

January 2018

Introduction

The TREQ®-317 is a rugged Automotive Tablet designed for in-cab operation. It provides a versatile vehicle-centric mobile computing platform for a variety of MRM (Mobile Resource Management) application support.

The TREQ®-317 is powered by Android™ "Open Platform" Operating System, offering a comprehensive development environment for independent application programming and system integration.

With integrated GPS, cellular communication, WiFi, BT, various sensors, camera connection option, and with support for a suite of vehicle and peripheral interfaces, TREQ®-317 enables a host of advanced mobility solutions such as: Fleet Management, ELD BYOD HOS, Driver Behavior, ADAS, Video Analytics, Driver Distraction alerts, Routing and Dispatch, Fuel Efficiency, Speed by Street, Navigation, Fleet Tracking, Driver Interaction and more.

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*

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TREQ®317 Platform Key Features

Device Key Features	Details
Platform Core	
Operating System	Google Android™ 4
Application Development Environment	Google Android™ ADT
Processor	- ARM Cortex™ - A8 Core - TI Omap 3715 1GHz - Graphics processing unit (GPU)
RAM	512MB
Flash	512MB
Memory Card Support	- SD / MMC (SDHC support) card slot x133, up to 32GB - SDIO interface
Audio CODEC	- Multi-channel - System audio support - Optional Cellular Voice and Bluetooth audio support
Real Time Clock	- HW based - Device Wakeup alarm configuration capability
Watchdog	- SW based for application recovery - HW based for system recovery
User Interface	
Display	7" Color TFT LCD, WVGA (800 X 480)
Display Backlight	Multi-level backlight (white LED)
Touch Screen	CTP - Capacitive touch panel
Keypad	Rubber tactile, multi-level backlight
Light Sensor	Configurable for device backlight adjustment
Internal Microphone	- High sensitivity - Noise filtered
Internal Speaker	- Mono, 1 x 3W 90 dB nominal @ 0.1m - Multi-level volume control
Communication Interfaces	
RS232 Ports (on device connector)	- 1 X 5 Wire (TX, RX, RTS, CTS, GND), 300 - 115200 bps - 1 X 3 Wire (TX, RX, GND) 300 - 115200 bps
USB OTG Port (on device connector)	USB 2.0 – low, full and high speed
USB Host Port1 (on device connector)	USB 2.0 - low, full and high speed, 500mA maximum
USB Host Port2 (on Device Panel)	USB 2.0 - low, full and high speed, 500mA maximum
Wireless Interfaces	
Wireless LAN	- 802.11 b/g/n - Internal on-board antenna

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Device Key Features	Details
Bluetooth (combined with Wireless LAN option above)	- Class 2 - Data transport support only - Internal on-board antenna
Cellular Communication and GPS	
Cellular (External antenna)	**GSM 3.5G** - Data: HSPA, UMTS, EDGE and GPRS - EUD-European and NAD-American bands **EV-DO** - Data: CDMA 1xRTT, EV-DO - American bands **4G LTE** - North American bands
GPS (External active antenna)	High sensitivity, 50 channels, -160 dBm, NMEA 0183 output format
Vehicle Diagnostic	
JBUS ports	- 1 x SAE J1939 CANBus V2.0B - 1 x SAE J1708
Motion Control	
Accelerometer	3 Axis
Peripheral Control	
Digital I/O	- 7 x Automotive inputs - 3 x Automotive inputs or 3 x inputs for video option: REAR, LEFT and RIGHT camera triggers - 7 x Open collector outputs
Analog Inputs	- 4 Analog inputs - 0V – 30V
Power	
Input Power	- Direct vehicle battery connection (12V/24V) - ISO 7637 compliant - Super Capacitors for Data storage protection
Mechanical	
Vibration	According to J1455
Mechanical Shock	According to J1455
Device Mounting	RAM® Mount mounting arm compatible
Environmental	
Temperature Range	- Operating: -4 °F to +158 °F (-20 °C to +70 °C) - Storage: -22 °F to +176 °F (-30 °C to +80 °C)
Humidity	95% ±5%RH, +40°C, non-condensing
IP	IP65
RoHS	Compliant
Certifications	
Standard Compliance	FCC, CE, PTCRB

![MICRONET logo]

Video Camera Support Option

Features	Details
Video	
External Camera connection	4 x video analog inputs for 360º degrees view

OEM Optional Features* (requires M-O-Q)

Features	Details
Interface Connections	
RS422/RS485 Port (Replacing RS232 Com Port 1)	EIA RS422 / EIA RS485
Touch Screen	Analog Resistive, 4 wire
External Audio	- Class A/B or Class D external speaker amplifier (Mono) - External microphone input (Mono)

*Please inquire about Minimum-Order-Quantity

Platform Accessories

Features	Details
Peripheral Cables	
Main interface cable	Supporting all the platform interfaces
Mechanical Accessories	
Mounting Arm	RAM® Mount, flexible, multi-directional mounting
SD Card Protective Cover	Optional Tamper proof SD card cover
SIM card protective cover	Optional Tamper proof SIM card cover
Front Panel Label	Optional Customizable "logo" printout

Physical Characteristics

Dimension	Measurement	
TREQ®-317 Dimensions & Weight		
Width	8.70 inch	221 mm
Height	5.23 inch	133 mm
Depth	1.18 inch	30 mm
Weight	17.50 oz.	498 Gram

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.