

# VBOX-3131

Taiwan Patent No. M447854

Intel® Celeron® Processor with 9~60V DC Input In-Vehicle Computer

## Features

- Intel® Celeron® Processor N3060, Up to 2.48 GHz
- Wireless support 5G / LTE / GPS, Wi-Fi + Bluetooth (by optional M.2 modules)
- 9V - 60V DC Power Input
- Smarter Vehicle Power Ignition for Variety Vehicle
- Ultra-compact Design 150 x 135 x 55.3 mm
- Battery Backup (optional)



## Introduction

VBOX-3131 is an ultra-compact fan-less in-vehicle computer with 5G module expansion capability. Based on Intel® Celeron® N3060 processor up to 2.48 GHz. VBOX-3131 features an ultra-compact design that can easily fit into restricted spaces. As robust connectivity, the VBOX-3131 can be installed with 5G, LTE, GPS, and Wi-Fi / Bluetooth by M.2 modules. It provides one HDMI and one DVI-D output for dual display connections; the DVI-D interface also provides stereo audio output and microphone input for the SINTRONES VDM-700 touch panel connection. This solution is perfect for fleet management, in-vehicle digital signage, and mobile DVR. Furthermore, it features intelligent vehicle power ignition and remote control in various vehicles. VBOX-3131 can effectively support cars in extreme weather and harsh environments, such as snowplows, trucks, E-buses, taxis, and forklifts. VBOX-3131 is an economy computing solution with a compact design for transportation applications.

## Specifications

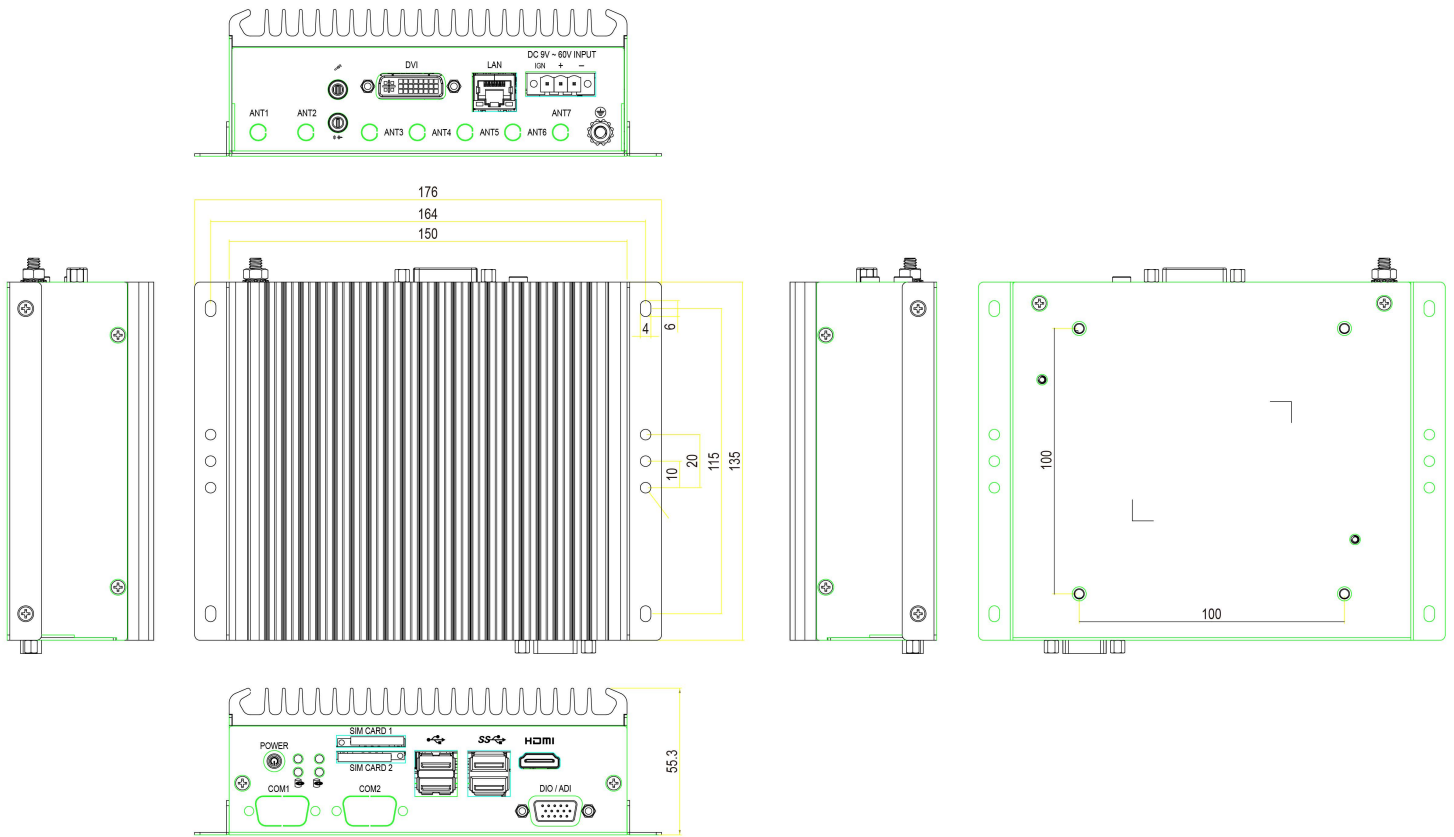
System	
CPU	Intel N3060 Dual Core CPU up to 2.48GHz
Memory	1 x DDR3L-1600 SO-DIMM up to 8GB
Graphics	Intel HD Graphics
LAN Chipset	1 x Intel i210AT Gigabit Ethernet
Watchdog	1 ~ 255 Level Reset
TPM	2.0
I/O	
USB Port	2 x USB 3.2 Gen 1 (Type A) 2 x USB 2.0 (Type A)
LAN	1 x RJ-45 for GbE
Video Port	1 x HDMI, 1 x DVI-D * Use only with Single Link DVI Cables
DIO Port	2 x Analog Input (9~60V), 4 x DI (5V~60V), 4 x DO (5V/100mA/port)
Audio	1 x Mic-in, 1 x Line-out
Expansion Bus	1 x M.2 3042/3052 Key B for LTE / 5G module
	1 x M.2 2230 Key A-E for Wi-Fi + Bluetooth
	1 x miniPCIe slot support (USB+PCIe Bus or mSATA)
Antenna	7 x Pre-cut Holes for External SMA Antenna
SIM Card Socket	2 x SIM Card Sockets Supported Onboard
Serial Port	2 x RS 232/422/485 (Optional, Model name VBOX-3131-2S)
Storage	
Type	1 x M.2 2280 Key M Supports SATA Bus *Additional heat Sink is required. Please contact with Sales Window for suitable model.
Software	
Operating System	Windows 10 IoT 64-bit, Ubuntu 16.04 64-bit

Environmental	
Operating Temp.	-30 ~ 60°C, ambient w/ 0.6m/s airflow
Storage Temp.	-30 ~ 85°C
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis MIL-STD-810G, Method 514.6, Procedure I, Cat.4
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with M.2 SSD
Certifications	CE, FCC Class A, E13
Power Requirement	
Power Input	9V - 60V DC Power Input
Power Mgmt.	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by BIOS and Software
Battery (UPS)	Internal Battery Kit for 10 Mins Operating (Optional) *UPS backup time varies depending on actual overall system power consumption. <b>Patent No. : M447854 - Build-in Battery</b>
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount and VESA mount
Weight	1100g
Dimensions	150(L) x 135(W) x 55.3(H) mm

All specifications are subject to change without notice.

## Dimensions

Unit : mm



## Ordering Information

<b>Part Number</b>	VBOX-3131, VBOX-3131-2S (w/optional 2 x RS232/422/485)
<b>Description</b>	Intel Celeron N3060 Braswell CPU with 9~60V DC Input In-Vehicle Computer
<b>State of Origin</b>	Made in Taiwan

## Optional Accessories

<b>DRAM</b>	DDR3L SO-DIMM 1600, 2GB~8GB, -40~85°C
<b>SATA SSD</b>	M.2 2280 SATA SSD Key M TLC 64GB~1TB.
<b>Wi-Fi / BT</b>	M.2 2230 Key A-E Card
<b>5G / LTE / GPS</b>	M.2 3042/3052 Key B Card
<b>Battery Backup</b>	BAT-3000-P Kit
<b>Power Adapter</b>	Power Adapter 12V/5A 60W
<b>CAN Bus</b>	mPCIe CAN Bus Module

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