

# VBOX-3131

Taiwan Patent No. M447854

Intel Celeron N3060 Braswell CPU In-Vehicle Computer 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 size fanless In-Vehicle Computer with 5G connectivity. It utilizes Intel® Celeron® N3060 Dual-Core CPU up to 2.48GHz. VBOX-3131 features an ultra-compact design measuring 150 x 120 x 53mm, which can easily fit into restricted spaces. As robust connectivity, the system can select 5G, LTE, GPS, and Wi-Fi / Bluetooth by M.2 modules. It is a building-in dual independent DVI-D, audio line out, and microphone In, the perfect solution for fleet management, in-vehicle digital signage, and mobile DVR. Furthermore, it features Smarter Vehicle Power Ignition and wireless remote control in variety of vehicles. VBOX-3131 can effectively support cars in extreme weather and operating conditions, such as snowplows, Trucks, Buses, taxis, and Forklifts. With Intel N3060, VBOX-3131 has wireless connectivity such as 5G, LTE, Wi-Fi, Bluetooth, and an ultra-compact enclosure with dual DVI-D and Audio. Sintrones' VBOX-3131 is a compact and versatile in-vehicle computer that can fuel various transportation systems.

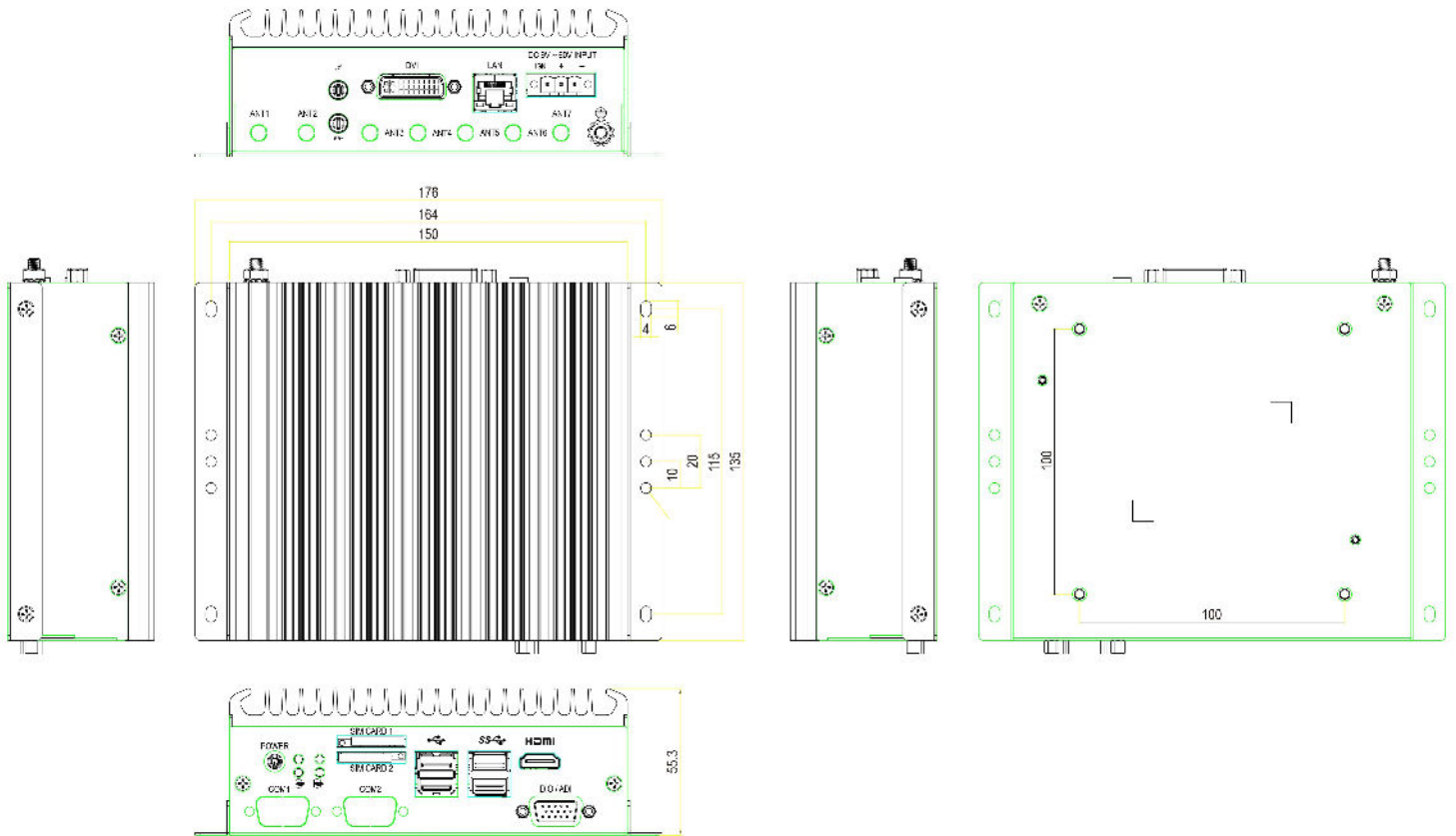
## Specifications

System	
CPU	Intel N3060 Dual Core CPU up to 2.48GHz
Memory	1 x DDR3L-1600 SO-DIMM up to 8GB
Chipset	N/A
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 1x1 2 x USB 2.0
LAN	1 x RJ45 Ports 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 B Key for LTE/5G module
	1 x M.2 2230 A-E Key for Wi-Fi + Bluetooth
	1 x miniPCIe slot support (USB+PCIe bus or mSATA)
Antenna	7 x Pre-cut SMA holes for Antenna Connectors
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 M key support SATA Bus
Software	
Operating System	Windows*, Ubuntu 16.04 *The supported version depends on the Microsoft® announcement.

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

## Dimensions

Unit : mm



## Ordering Information

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

## Optional Accessories

DRAM	SO-DIMM max.DDR3L 1600, 2GB~8GB, -40~85°C
SATA SSD	M.2 2280 SATA SSD M key TLC 64GB~1TB.
Wifi/ BT	M.2 2230 A-E Key Card
5G/ LTE/ GPS	M.2 3042/3052 B Key Card
Battery backup kit	BAT-3000-P kit
Power adapter	Power Adapter 12V/5A 60W Jack