



# 2022

Intelligent Platform & Services in Smart City Product Selection Guide

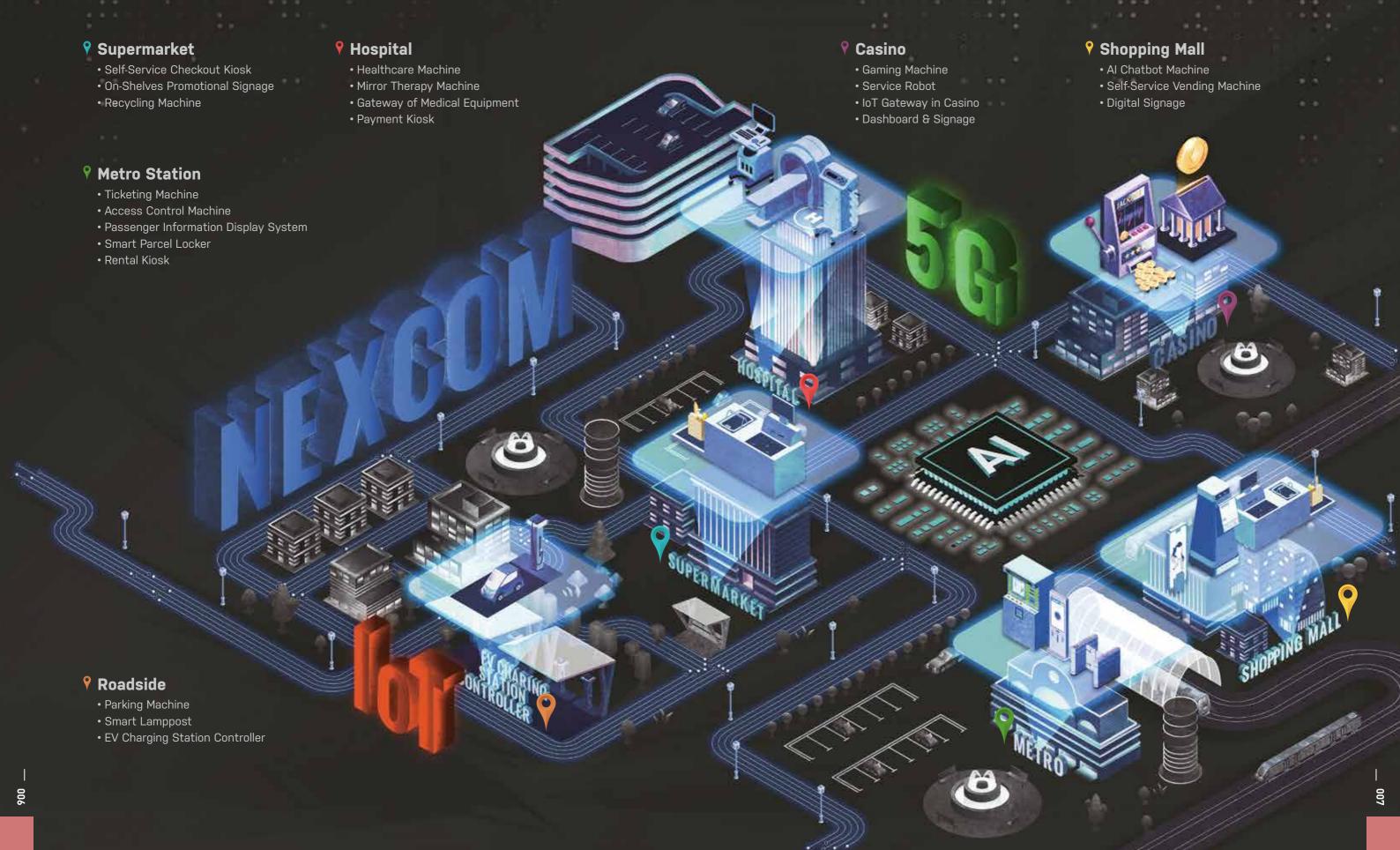


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# The Future • Your Way

Drive Digital Transformation Together in Smart City



# **Your Vision • Our Mission**

Co-Creating AI, IoT & 5G Solution **Ŷ** Shopping Mall **♀** Roadside **Warehouse** • Self-Service Vending Machine • EV Charging Station Controller • Al Security & Access Control • Al Chatbot Machine Parking Machine • Automated Guided Vehicle, AGV **№** Metro Station • Digital Signage Smart Lamppost • Package & Sorting Machine Ticketing Machine • Passenger Information Display System • Access Control Machine • Smart Parcel Locker • Rental Kiosk REMINIM WARIATONS! **Ŷ** Quick Service Restaurant • Digital Menu Board • Self-Ordering Kiosk • Drive-Thru Menu Board



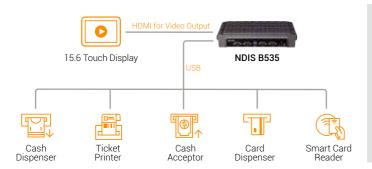
An entrance lined with yellow transit kiosks will come into sight when you step out of the Istanbul airport shuttle bus. Down the stairway to any metro station, the same type of infokiosks are always on, ready to assist. Being a crucial part of Turkey's largest public transportation, these self-service kiosks process hundreds of thousands of ticket transactions for Istanbul on the daily basis. Serving a city with a population more than 15 million, the self-serving machines offer the same uniform yet intuitive experience, from metro card selling, ticket printing, to returning the changes, quick and efficient. NEXCOM is proudly to be the solution provider, enabling every engagement, click or draw, to be smooth and effortless as it is intended.

Ticket sales procedures through manual counters were an obvious bottleneck during the rush hours, and long ques have plagued metro services for years. The operator thus held a high hope for the revamp to the ticketing system could help relieve the congestion in busy moments, without the need to reinforce for specific shifts.

The NEXCOM NDIS B535 then came fully-geared to the rescue. The ruggedized appliance easily withstood the hustle and bustle of a semi-outdoor environment. The 6th Gen Intel® Core™ processor,

coupled with a fanless design, a rare blend for a system of its size, proved significant performance along with reliable output throughout long hours of operation. The fanless design of the infokiosk also meant a huge advantage in maintenance for minimal clogging at the air vent, which contributed a majority of downtime for fanned systems, according to statistics. A rich set of I/O made connections to peripherals breeze for the integrator, from cash acceptor and dispenser, card reader, all the way to ticket printers on a single platform. The self-service kiosks delivered a pleasant purchasing experience for passengers: quick, intuitive and

The new ticketing system brought the long awaited efficiency back to the old city. A blend of robust design, outstanding reliability, ease of maintenance, and comprehensive connectivity, the NDiS B535 makes an economical choice for the metro operator, while winning over the hearts of commuters and visitors as well. Also sharing the same winning combinations, every NDiS box PC meets a high standard of custom peripheral integration and is about to extend the flexibility to more services around the globe. At NEXCOM, delivering satisfying results in cost-effectiveness with building partners has been and will always be our first priority.



# NDiS B535

- 6th Generation Intel® Core™ processor
- Intel<sup>®</sup> integrated HD 530 graphic engine
- Support 3 independent 4K2K 60Hz video out
- USB3.0 x 6, RS-232 x 4, Dual GbE LAN support
- NGFF type storage and WLAN support
   DirectX<sup>®</sup> 12 support
- Fanless design





Visual projections, whether in art installation or traditional cinema form, transport us to other times and places, a welcome distraction especially in the era of COVID-19. In the future, when the epidemic is under control and protective measures are thoroughly enforced, high-quality digital projection will continue to be in great demand. NEXCOM's client, a worldwide distributor of audio-visual systems, needed to find a solution to replace and modernize clients' cinema projectors to prepare for forthcoming indoor and outdoor projection mapping needs.

More specifically, NEXCOM was tasked with supplying the computing engine and customizing its services to help the company fulfill the requirements of clients across the globe. The computer needed to be compact and budget-friendly, yet powerful enough to drive its large-scale cinema projector. In addition, the client called for NEXCOM to design accessories such as touch display and cable to easily connect the display to the projector.

NEXCOM offered a cinema projector solution based on a computer-on-module (COM), with customized 10" touchscreen

controls and three-in-one cable that combined USB, VGA, and DC inputs. With the durable construction and modular design, the client could save money; it could keep the same projector longterm and swap out components as needed. The centerpiece of the projector was the ICES 620X COM, highlighted by an embedded Intel Atom® E3800 processor, offering affordability and energy efficiency, especially critical as digital projections can consume considerable amounts of power. The ICES 620X also integrated Intel's Gen7 graphic engine for exceptional highdefinition display, while including peripheral USB and VGA ports. For convenience, NEXCOM tailor made the three-in-one cable which connected the COM to the external touch display, a smaller version of NEXCOM's APPD series displays, but large enough for users to effortlessly operate the projector. In addition, NEXCOM provided shielding against electromagnetic interference (EMI) to ensure that these expensive components were well protected and avoided malfunctions.

NEXCOM once again demonstrates that it keeps customers top of mind in delivering comprehensive, specially made solutions.



# APPD 1000T-CD

- 10.1", 16:10 LCD Panel
- 4-wire, resistant touch panel sensor
- 1 x VGA, 1 x USB, 1 x lockable DC Power Jack
- Support 12-24V DC Input
- Dimension 248.2 x 166.8 x 36.3mm
- · Linux OS, Windows XP & Win 7
- 1G peak, 5~500Hz(Random)
- 15G peak acceleration (11 msec. duration)

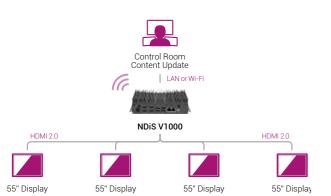




The concept of "working smarter" is especially appropriate in our fast-paced, rapidly changing world. So why not work smarter - and save yourself money, time, and space? NEXCOM recently collaborated with a digital marketing agency in need of a computer for smart city digital advertising, specifically in railway stations in Melbourne, Australia. This computer needed to support four independent 55" displays at full HD, be compact enough to fit in small spaces yet provide sufficient I/Os, and be high performance without requiring excessive energy or maintenance. NEXCOM guickly found the perfect solution for their requirements in a premium digital signage player, the NDiS V1000.

As the primary need was to quickly catch customers' attention, the NDiS V1000's four HDMI 2.0 ports and its AMD Ryzen™ Embedded V1605 CPU and Radeon™ Vega 8 GPU SoC brought quadruple displays with 4k-resolution images to life. The CPU was an especially incredible choice with its high performance at a low price point. The GPU also provided outstanding graphics while generating less thermal power than other competitor solutions, thus saving on electricity costs. Moreover, the integrated SoC meant a more compact-sized player that could be easily embedded behind the four displays.

What's more, the NDiS V1000's simple and clean design, based on previous customer feedback, provided multiple benefits to the client. To reduce clutter, most I/Os were located on just one side. For flexible uses, as the client specifically needed to frequently update content and upload information to the control room - in tandem with having remote management capabilities - NEXCOM supplied a LAN port and Wi-Fi module. In addition, the digital signage player's fanless feature consumed less energy, made less noise, and required less maintenance. Finally, the NDiS V1000 was durable enough to operate in the railway station's semi-outdoor and 24/7 environment, solidifying its distinction as a first-rate, all-in-one choice.







Olympia zentrum

\*\* Petuelring

When picturing mass transport in the U.K. and Hong Kong, the ubiquitous double-decker bus first comes to mind. But with almost twice as many passengers as an ordinary bus, this means that system integrators need to utilize twice the amount of space to provide all passengers with pertinent information. NEXCOM's client needed an embedded board that was versatile enough for different types and sizes of passenger information and advertising displays in buses, yet adaptable for other modes of transportation, such as ferries. As multiple boards were required for each vehicle, they needed to be easily installed, power efficient, and cost effective.

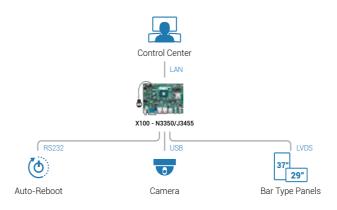
All A-Board!

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NEXCOM recommended the X100-N3350 3.5" embedded board. Simple but powerful, and onboard with Intel<sup>®</sup> Celeron<sup>®</sup> N3350 processor, its price-performance ratio was best in its class to fulfill basic client requirements at a reasonable cost. It also satisfied the client's need to connect other peripheral devices.

The double-decker buses required a computer that was adaptable for various spatial requirements. Because the X100 was an embedded board, it was flexible and small enough to connect to different size and bar-type panels via LVDS for information displays. It also easily provided real-time bus stop information by linking to a central telematics computer through LAN. This also meant that signage was easily updated and customizable based on location.

The X100 avoided unexpected power loss, as the power jack utilized a lockable design. The watchdog timer connected via RS232 port and central power supply to automatically detect and recover from potential malfunctions. Additionally, in order to optimize operations and measure occupancy, the client utilized the multiple USB ports for cameras and their people counting function. Finally, E13 compliance offered assurance that the smart city embedded board was a safe and suitable for vehicular operations.



# X100

- Onboard Intel® Celeron® N3350/J3455 processor
- Two display: 1x HDMI and LVDS
- 2 x RJ45 LAN with LED for Gigabit Ethernet
- 2 x USB 3.0, 2 x USB 2.0, Line-out
- Serial port: 1 x RS232, 1 x RS232/422/485 port
- E13 mark conformity





The development of the Internet of Things means that technology has found its way into every corner of our everyday lives. And for good reason: it's made our lives faster and easier! An Asia supermarket chain owner needed an economical way to better understand customer behavior and target its marketing. The client specifically required a stable, fanless system that could run video cameras 24/7 for analysis and dual displays for advertising.

# Attention shoppers: pick up the AIEdge-X®100 today!

NEXCOM offered a comprehensive "AI precision marketing"

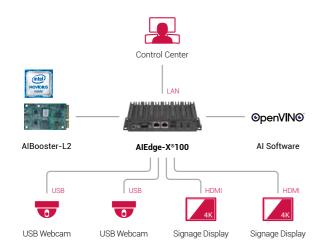


Figure 1. The AIEdge-X®100 AI precision marketing system

system in the AIEdge-X®100, powered by Intel® Celeron™ CPU and Movidius™ Myriad™ X VPU (via NEXCOM AIBooster®-X2 module). The AI at the edge gateway also included Intel's OpenVINO™ AI and third-party 3D software for facial recognition analysis, two USB 3.0 ports to link cameras for video streaming shopping behavior, two HDMI 2.0 ports to connect dual displays, and a LAN port to send information to the edge and control center.

# Out with the old, in with the new

Understanding the power of edge AI can unlock the possibilities of targeted marketing. The traditional, face-to-face marketing techniques many supermarkets utilize – often with free tastings – is great for a personal touch! But they don't particularly tune into customers' individual needs and instead increase the costs of demonstration table supplies and labor. NEXCOM's AIEdge-X®100 AI precision marketing system reduces those unnecessary costs as well as the guesswork of understanding customer needs.

# "Al precision marketing" is the way

Our marketing solution observes shopper behavior and sends information to the edge to perform big data analysis. The results you obtain can be the catalyst for "Al precision marketing" and its multiple benefits, avoiding the presumptions that come with traditional marketing techniques. First, you



control and target advertisements based on demographics and shopping patterns. For instance, you can differentiate and run promotions for the typical office worker after 6 PM and stay-at-home parents during the day. Secondly, it promotes cost effectiveness: adjust purchasing patterns so that you don't waste or deplete stock. Finally, it simplifies marketing efforts and eliminates guesswork. Adjust event promotions, both face-to-face and paper-based, according to supply and demand forecasts.

# The comprehensive, Intel-ligent system

With a high price-performance ratio, the AIEdge-X®100 is available for Windows and Linux and relies on state-of-the-art Intel® technology, a combination of CPU, GPU, and deep learning toolkit, to produce outstanding results. The AI at the edge fanless system uses a Celeron® processor, which delivers performance and value, on top of power efficiency. We include our AIBooster®-X2 deep learning accelerator card, which includes two Movidius™ Myriad™ X VPU chips, providing enough processing power to simultaneously operate two cameras for capturing shopping footage. Finally, the fanless gateway includes the OpenVINO toolkit to help you quickly facilitate inference of deep learning models. Combined with third-party 3D software, you're able to perform facial recognition to more effectively analyze customer demographics and behavior.

# Structured information flow and design

The onboard USB 3.0 ports support cameras for video streaming shopping behavior to the AlEdge-X®100 gateway. The gateway then performs preliminary analysis with the aforementioned Intel® technology before sending information via LAN connection to central management at the edge. This is where management can first determine purchasing habits by performing big data analysis of customer profiles, which then drives the design of targeted advertising. As central management controls systems and their content, advertising is transmitted back via LAN to display on two HDMI monitors that support 2K and 4K resolution images. The advantages of using display monitors is that they're automatic and can run 24/7, which in-person advertising can't achieve, saving you time and money over the long run.

# We're here for you

NEXCOM's AlEdge-X®100 and its Al precision marketing system are an unparalleled combination of superior performance and advanced technology. The visual solution is the smart choice to eliminate the guessing game and focus instead on needs-based marketing, with the end goal of enhancing the shopper experience. In fulfilling its commitment to meet every customer specification, NEXCOM provides an assortment of Al-enhanced solutions in its lineup.



Mirror therapy improves the movement of affected limbs after a stroke. The original approach, as the name implies, involved using a box with a mirror for this treatment method. Nowadays, the mirror is replaced with a modern slim computer using high-resolution cameras and displays that bring this treatment method into the 21stcentury healthcare system.

On our customer's mirror therapy device, the high-resolution screen might be the standout feature, but providing silent and powerful performance in the background is the NDIS B537 fanless embedded system multimedia player. This embedded system provides the perfect combination of features to fit with the design principles that are key for medical devices. The embedded system is compact, yet packs some computing punch. It works tirelessly and does it silently to maintain the quiet of the medical facility. Finally, it provides integrators with the complete customization needed for seamless

Getting computing power into a compact package is no easy task, and the Intel® i7-7700T long-term support CPU does the trick. It provides the horsepower for delivering smooth graphics at up to 4K2K and supporting the various I/O. The slim computer design of the system makes it perfect for integrating into the mirror therapy system where there's not much space inside. Other powerful features include four USB 3.0 ports that connect to high-definition cameras, support for up to two 4K screens, and Wi-Fi through a mini PCle card.

Going fanless is the key to a noise-free embedded computer suitable

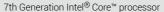
for a medical office. The NDiS B537 does this without sacrificing computer performance, while harnessing the advantages of keeping harmful dust out of the system, thereby increasing system life. Importantly, the I/O combination is just right for this application, providing just the right balance of extras for reliable operation, while still keeping costs in check. Amongst the external connectors, there's HDMI to connect to the display (multi-display support available) RS-232 for console management, USB for maintenance, USB for camera movement detection, and LAN and Wi-Fi that allow content

Great products need great branding, and that brand consistency runs through every detail of the product. To give the customer full control over their branding, the BIOS is set to show the customer's logo and branding, showing their own logo right from the time the mirror therapy system is turned on. Beyond hardware considerations, this small step is the icing on the cake that transforms a potentially "hack" retrofit into a fully integrated, seamless system. On top of that, NEXCOM offers a wide range of flexible services to customize many different aspects of the hardware.

The NDiS B537 is the ideal computer for a mirror therapy system and for other medical machine integration. Small and slim design fits almost everywhere, while still having ample processing power. The reliable fanless computer design keeps out dust and makes no noise that could disrupt the quiet of medical facilities. All of this comes in a fully customized package for the ultimate polished user experience.

# NDiS B537

- 7th Generation Intel<sup>®</sup> Core<sup>™</sup> processor
- Support HDMI 2.0 output (4K2K/60Hz support)
- Compact and slim design (H: 33mm)
- Support socket type CPU up to 35W





NGFF/mini-PCIe slot support Wi-Fi and 4G module



For urban dwellers, speed is the name of the game. The less time the dweller waits for food and drinks, the better the impression of the restaurant - and customer service scores. It's no wonder that drive-thru services have been such a blessing to customers, especially during the pandemic, as it simultaneously reduces person-to-person contact and promotes touchless, safe ordering. In Taiwan, a well-known coffee chain tasked NEXCOM to help with its drive-thru rollout to replicate its impeccable instore service.

Quick and Easy

NE(COM

First, the drive-thru system needed to link to display boards that duplicated and presented information that was available instore, also with eye-catching graphics. The system also needed to support video cameras to view passengers as soon as they drove up to the display boards. Furthermore, the coffee chain wanted a system that could quickly and accurately process information so that the drive-thru customer service experience was on par with in-store.

NEXCOM came to the rescue with its powerful, high-performance digital signage player NDiS B360. The latest 11th Generation

engine (depending on CPU) allowed the box player to push information via HDMI or DP quickly and dynamically to ordering displays with rich 4K visuals. For the coffee chain's convenience, NDiS B360 also had an array of I/O interfaces to support peripherals, such as video cameras. Offsite and remote management was a breeze with NEXCOM's embedded computer. It could connect through one of two LAN

Intel<sup>®</sup> Core<sup>™</sup> processor and integrated UHD or Iris<sup>®</sup> X<sup>®</sup> graphics

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ports to upload and download from the Taipei server center, no matter where the store was. For peace of mind, it even included Intel's vPro management platform to control the computer remotely in case of emergencies and system failures.

Finally, cementing its practicality for drive-thru systems, the NDiS B360's thermal design and operating temperature of -20 to 60°C allowed the embedded computer to stand in semioutdoor environments. At the same time, its fanless construction meant that operations were noise-free. All of these customercentric features are just some of the many reasons NEXCOM has become the choice partner for the restaurant industry.

# **NDiS B360**

# NDiS B360



- 11th Generation Intel® Core™ (Tiger Lake-UP3) processor SoC
- Dual 4K @ 60Hz display output, DP++, HDMI 2.0
- Support 4K @ 60Hz eDP display output
- Dual LAN ports and 4 x USB 3.0 ports for easy connection
- Compact and slim design (H: 36mm)
- Onboard M.2 2280 Key M with PCIe signal for storage modules
- Onboard M.2 2230 Key E for optional Wi-Fi modules
- Support extended temperature for outdoor application





Japan's "super-aging" society is straining its healthcare system. Currently, over 65s make up 29% of the population, but by 2050 that number is expected to reach 39%. The healthcare challenges for this aging population include increasing health costs, increased burden on medical workers, and a shortage and uneven distribution of doctors in rural areas. As a part of the Japan Revitalization Strategy 2016, Shinzo Abe announced revolutionary healthcare measures, including big data for diagnosis, new drugs, and medical devices; personalized healthcare with IoT; and improved quality and productivity of nursing care with technologies such as robots and

Our client, a major Japanese electronics brand, was tasked with outfitting mobile health clinics (MHCs) to bring health services to people who need them. Integrating the MHC medical devices into the broader digital health records system required an embedded computer to serve as the IoT gateway to their private cloud.

Although slated for use in a vehicle, they didn't need the vibration or shock resistance typically required for in-vehicle use. This IoT platform needed to provide a suitable set of core functions, include connectors for external devices, and connect to their private cloud.

Featuring an Intel® Apollo Lake N3350/N4200/J3455 processor and up to 8 GB of memory, the Neu-X100 fanless computer starts with just the right balance of power required for stable operation. The compact size makes it a perfect choice for the space-limited environment in an MHC. It's also ideally designed for use in IoT

4G/LTE Patient Info Operation Data Collection via Mobile NVR System

applications in controlled indoor environments, perfect for an IoT platform that serves as a gateway in an MHC.

The primary functions needed for this MHC were connections to the x-ray machine, barcode scanner, and upload to the internet through 4G. The Neu-X100 has two RJ-45 GbE ports that collect the measurement data from medical devices and connect to the NVR system that collects traffic and location information. There are two ÚSB 3.0 ports for peripheral devices, and in this instance connected to the barcode scanner used to scan people's health cards. Finally, a mini-PCle LTE add-on card, a sim card slot on the mainboard, and antennas connected through two antenna holes already provided in the casing provided the 4G internet connection.

Beyond basic hardware setup, proven compatibility with major cloud providers can mean the difference between weeks of headaches and drama trying to set up a custom solution and simply plugging into existing reliable systems. In this regard, the Neu-X100 is Microsoft Azure certified and uses Windows 10 IoT for seamless integration into their current systems.

The Neu-X100 is a no-brainer for IoT gateway setup with Microsoft Azure. It sports a processor more than capable of handling the expected load while using only a minimal amount of power and providing sufficient peripherals for most applications. The Neu-X100 provided the best balance of cost and performance for our client, making installation and integration quick and simple

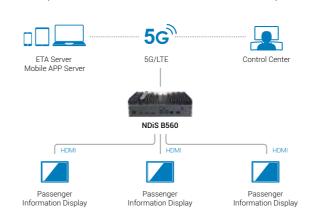
Neu-X100

- Intel<sup>®</sup> Celeron<sup>®</sup> (Apollo Lake) N3350/N4200/J3455 processor
- 3.5" MB size as slim chassis design
- Support HDMI 2.0 output · Fanless design
- · mini-PCIe slot support Wi-Fi and LTE module

For public transportation users, convenience is of utmost importance, as well as saving time and money. These needs are especially crucial when taking buses, which are subject to traffic delays and passenger-related issues. To help bus users stay informed of statuses while presenting announcements and news as they wait, passenger information display systems (PIDS) that integrate all of the above information have become welcome additions to many transportation agencies. A Hong Kong bus company was one such agency that looked to enhance its passengers' travel experiences.

The bus company had three major needs. First, the passenger display system needed to be appealing enough, visually and content-wise, to capture travelers' attention. Secondly, it needed to automate the processes of updating passengers frequently with announcements and news items. Finally, the company wanted to generate additional revenue streams via in-bus promotions and

NEXCOM provided the answer in its NDiS B560 fanless computer, a



perfect fit for bus stops' PIDS with its set of cutting-edge features. The box PC integrated a combination of advanced 9th and 8th Gneration Intel® Core™ processors and UHD 630 graphic engines with three independent 4K2K 60Hz display outputs to bring content powerfully to life. The thermal design and support for extended operating temperatures (-20~60°C) made it suitable for bus stops' semi-outdoor environments. Moreover, the compact and slim design meant that it could fit in the stops' limited spaces.

The NDiS B560 also supported 5G – and Wi-Fi – meaning that it could connect with the control center and update information in real time, pushing content such as announcements and news items to bus stop displays, and advertisements and promotions to in-vehicle screens.

With an assortment of visual solutions, NEXCOM continues to empower transportation agencies with tools to enhance and enliven the customer experience. NEXCOM strives to integrate all of the newest advancements in its solutions to encourage the continued development of the smart city.

# NDiS B560



- Support 9/8th Gen Intel<sup>®</sup> Core<sup>™</sup> i9/i7/i5/i3 LGA socket type embedded processor, up to 35W
- Intel<sup>®</sup> Q370
- Intel<sup>®</sup> integrated UHD 630 graphic engine
- Support 3 independent 4K2K 60Hz display output
   Support 1 x 2.5" SATA HDD
- 3 x HDMI 2.0, 6 x USB 3.0, 2 x GbE LAN, 4 x COM,
- 1 x Line-out, 1 x Mic-in
- Support M.2 Key B/E/M Support extended temperature -20~60°C

SELECTION GUIDE SELECTION GUIDE

# **Box Computer**

#### Edge Computing System Model Neu-X100 Neu-X101 Neu-X300 Neu-X300-F65 Intel® Celeron® N3350 8th Gen Intel® Core™ 8th Gen Intel® Core™ CPU Intel® Celeron® J3455 Intel® Celeron® J3455 (socket, 35W) (socket, 65W) Intel® Q370 /H310 PCH Intel® Q370 PCH Chipset Intel® HD 500 Graphics Intel® UHD Graphics 630 Intel® HD 500 Graphics Intel® UHD Graphics 630 Graphics 1 x DDR3L SO-DIMM 1 x DDR3L SO-DIMM 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM Memory 32GB max. 32GB max. 8GB max. 8GB max. **Gigabit LAN** WLAN Optional Optional Optional Optional Hard Disk Interface M.2 2242 Key M M.2 2242 Key M M.2 2280 Key M M.2 2280 Key M Flash Storage (SATA) (SATA) (SATA/PCIe x4) (SATA/PCIe x4) 3 x HDMI 2.0 (Q370) Display Output 2 x HDMI2.0 2 x HDMI1.4 3 x HDMI 2.0 2 x HDMI 2.0 [H310] Display Resolution Max. 4096 x 2160 60Hz 3840 x 2160 30Hz 4096 x 2160 60Hz 4096 x 2160 60Hz **Output Channel** 2 independent or clone 2 independent or clone 3 independent or clone 3 independent or clone Hardware decode: Hardware decode: Hardware decode: Hardware decode: MPEG-2 (H.262), MPEG-2 (H.262), Video Capability HEVC (H.265), H.264, MVC, HEVC (H.265), H.264, MVC, MPEG-4(H.264), MPEG-4(H.264), (Hardware Decode) VP8, VP9, MPEG2, VC-1, VP8, VP9, MPEG2, VC-1, JPEG/MJPEG, JPEG/MJPEG, WMV9, JPEG/MJPEG WMV9, JPEG/MJPEG HEVC(H.265), HEVC(H.265), VC-1, VP8, VP9 VC-1, VP8, VP9 1 x Line-out 1 x Line-out 1 x Line-out Audio Output 1 x Line-out 1 x Mic-in pin header 1 x Mic-in (pin header) 1 x Mic-in (pin header) 1 x Speaker pin header 1 x RS232/422/485 1 x RS232/422/485 1 x RS232/422/485 1 x RS232/422/485 **COM Port** 2 x RS232 1 x RS232 (internal) 1 x RS232 (internal) 2 x RS232 (internal) 2 (edge) 4 x for H310 (internal) USB 2.0 4 (internal) 2 (internal) 6 x for Q370 (internal) USB 3.0 1 x mini-PCIe 1 x mini-PCIe Expansion Slot 1 x M.2 2230 Key E 1 x M.2 2230 Key E (SIM socket) (SIM socket) -5°C~50°C -5°C~50°C -5°C to 45°C Operating Temp. 0°C to 50°C 19V DC 12V DC 12V DC 12V DC DC Input incl. AC/DC power adapter incl. AC/DC power adapte incl. AC/DC power adapter incl. AC/DC power adapter Dimension 179.5 x 106 x 37 179.5 x 106 x 37 190 x 200 x 54.4 190 x 220 x 46.8 WxDxH(mm) Win10/Linux Win10/Linux Win10/Linux **OS Support** Win10/Linux

# **Box Computer**

#### isual Edge Computer Model Neu-X302 NDiS B535 NDiS B537 NDiS B537-I 8th Gen Intel® Core™ 6th Gen Intel® Core™ 7/6th Gen Intel® Core™ 7/6th Gen Intel® Core™ CPU (socket, 35W) (socket, 35W) (socket, 35W) (Socket, 35W) Intel® Q370 /H310 PCH Chipset Intel® Q170 Intel® H110 Intel® Q170 Intel® UHD Graphics 630 Graphics Intel® HD 630 Graphics Intel® HD 630 Graphics Intel® HD 530 Graphics 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM 32GB max. Memory 32GB max. 32GB max. 32GB max. Gigabit LAN 2 Optional WLAN Optional Optional Optional **Hard Disk Interface** 1 x 2.5" SATA 1 x 2.5" SATA 1 x 2.5" SATA M.2 2280 Key M (SATA/PCIe x4) Flash Storage M.2 2242/2280 Key M 3 x HDMI 2.0 (Q370) 1 x HDMI 1.4 2 x HDMI 2.0 (H310) 1 x HDMI 1 4 3 x HDMI 2.0 1 x HDMI 2.0 **Display Output** 1 x HDMI 2.0 1 x DisplayPort 4096 x 2160 60Hz Display Resolution Max. 4096 x 2160 3840 x 2160 3840 x 2160 3 independent or clone **Output Channel** 3 independent or clone 3 independent or clone 2 independent or clone Hardware decode: MPEG-2 (H.262), MPEG-4(H.264), Video Capability MPEG2,VC1, VP8, MPEG2,VC1, VP9, MPEG2,VC1, VP9, JPEG/MJPEG, H.264, H/265 (Hardware Decode) H.264, H/265 H.264, H/265 HEVC(H.265), VC-1, VP8, VP9 1 x Line-out, 1 x Line-out, 1 x Line-out, **Audio Output** 1 x Line-out 1 x Mic-in 1 x Mic-in 1 x Mic-in 1 x Mic-in 1 x Speaker (internal) 4 x RS232 **COM Port** 2 x RS232 (internal) 1 x RS232/422/485 2 x RS232 (Internal) USB 2.0 2 (internal) 2 (internal) 2 (internal) 4x for H310 (Internal) 6x for Q370 (Internal) USB 3.0 1 x mini-PCle 1 x mini-PCle 1 x mini-PCle **Expansion Slot** 1 x M.2 2230 Key E -10°C to 45°C -10°C to 45°C Operating Temp. 0°C to 40°C -5°C to 45°C 12V DC 12V DC 12V DC DC Input incl. AC/DC power adapter incl. AC/DC power adapter incl. AC/DC power adapter 12V DC incl. AC/DC power adapter Dimension 294 x 198 x 52 295 x 189.9 x 33 295 x 189.9 x 33 W x D x H (mm) 190 x 200 x 64.3

Win7/Win8.1/WES8/

Win10/ Linux

**OS Support** 

Win10/Linux

Win10/Linux

Win10/Linux

SELECTION GUIDE

# **Box Computer**

#### Visual Edge Computer Model NDiS B560 NDiS B560S NDiS B360 NDiS B328-KI3 9/8th Gen Intel® Core™ 9/8th Gen Intel® Core™ Intel® Core™ i5-1145G7E, CPU Intel® Core™ i3-7100U Intel® Core™ i3-1115G4E (socket, 35W) (socket, 35W) Intel® Q370 Intel® H310 Chipset Intel® Iris® Xº Graphics (on i5), Intel® UHD Graphics for Intel® HD 620 Graphics Graphics Intel® HD 630 Graphics Intel® HD 630 Graphics 11th Gen Intel® processors (on i3) 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM 1 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM Memory 32GB max. 32GB max. 32GB max. 32GB max. Gigabit LAN WLAN Optional Optional Optional Optional Hard Disk Interface 1x 2.5" SATA 1 x 2.5" SATA 1x 2.5" SATA M.2 2280 Key M M.2 2280 Key M M.2 2280 Key M M.2 2280 Key M Flash Storage (SATA/PCIe x4) (SATA) (PCIe x4) (SATA/PCIe x4) 1 x DP++ **Display Output** 3 x HDMI 2.0 2 x HDMI 2.0 2 x HDMI 1.4 1 x HDMI 2.0 HDMI: 4096 x 2160 4096 x 2160 3840 x 2160 Display Resolution Max. 4096 x 2160 DP++: 4096 x 2304 Output Channel 3 independent or clone 2 independent or clone 2 independent or clone 2 independent or clone MPEG-2 (H.262), MPEG-2 (H.262), AV1, VP9 8/10/12bit, MPEG-4(H.264), MPEG-4(H.264), MPEG1, MPEG2, Video Capability H.265/HEVC 8/10/12 bit, H.264/AVC, MPEG2 (Hardware Decode) JPEG/MJPEG, HEVC(H.265), JPEG/MJPEG, HEVC(H.265), VP8, VC1, H.264, H.265 VC-1, VP8, VP9 VC-1, VP8, VP9 1 x Line-out 1 x Line-out, 1 x Line-out, Audio Output 1 x Line-out, 1 x Mic-in 1 x Mic-in (internal) 1 x Mic-in 1 x Mic-in 1 x Speaker (internal) 1 x RS232/422/485 1 x RS232/422/485 COM Port 3 x RS232 3 x RS232 USB 2.0 4 (internal) USB 3.0 1 x M.2 3042/3052 Key B 1 x M.2 3042/3052 Key B **Expansion Slot** 1 x M.2 2230 Key E Operating Temp. -20°C to 60°C 0°C to 40°C -20°C~60°C -20°C~50°C with SSD 12V DC 12V DC 12V DC 19V DC DC Input incl. AC/DC power adapter incl. AC/DC power adapter incl. AC/DC power adapter incl. AC/DC power adapter Dimension 224.34 x 147.4 x 35 238 x 192 x 67.29 238 x 192 x 39 200 x 132.6 x 36 W x D x H (mm) **OS Support** Win10/Linux Win10/Linux Win10 Win10

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NDiS B336R	NDiS B337	NDiS B338	NDiS B115	NDiS B116
Intel Atom® E3950	Intel® Celeron® J3455	Intel® Celeron® J6412	Rockchip RK3288	Rockchip RK3399
-	-	-	Embedded	Embedded
Intel® HD 505 Graphics	Intel® HD 500 Graphics	Intel® UHD Graphics for 10th Gen Intel® processors	Mali-T760 (embedded)	Mali-T864 (embedded)
2 x DDR3L SO-DIMM 32GB max.	1 x DDR3L SO-DIMM 8GB max.	2 x DDR4 SO-DIMM 32GB max.	DDR3 2GB onboard	DDR4 2GB onboard
1	2	2	1	2
Optional	Optional	Optional	Onboard 802.11 b/g/n	Optional
1 x 2.5" SATA	-	-	-	-
	M.2 2242 Key M (SATA)	M.2 2280 Key M [PCIe x4]	eMMC2 16GB onboard	eMMC 8GB onboard
2 x HDMI 1.4	2 x HDMI 1.4	3 x HDMI 2.0	1 x HDMI 2.0	1 x HDMI 1.4 1 x HDMI 2.0
3840 x 2160	3840 x 2160 30Hz	4096 x 2160	3840 x 2160	3840 x 2160/ 4096 x 2160 (single display)
2 independent or clone	2 independent or clone	3 independent or clone	1 independent	2 clone
MPEG1, MPEG2, VP8, VC1, H.264, H.265	HEVC (H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG	H.264/AVC, MPEG-2, VC-1, JPEG/MJPEG VP8, VP9, HEVC 8, 10-bit	MPEG1,MPEG2,VC1 H.264,H.265,VP9	MPEG-1, MPEG-2, MPEG- 4, H.263, H.264, AVS, VC-1, VP8, MVC, HEVC/H.265
1 x Line-out, 1 x Mic-in	1 x Line-out 1 x Mic-in (internal) 1 x Speaker (internal)	1 x Line-out 1 x Mic-in 1 x Speaker (internal)	1 x Line-out	Line-out, Mic-in, Speaker (internal)
1	1 x RS232/422/485 1 x RS232	1 x RS232/422/485 3 x RS232	1 (UART)	1
	2 (edge) 2 (internal)	5	2	1
5	2	1	-	1
1 x mini-PCle 1 x M.2 2230 Key E	1 x mini-PCle	1 x mini-PCle 1 x M.2 3042/3052 Key B	-	1 x mini-PCle
-20°C to 60°C	-20°C~60°C	-20°C~60°C	-10°C to 50°C	-20°C to 60°C
19V DC incl. AC/DC power adapter	12V DC incl. AC/DC power adapter	12~24V DC incl. AC/DC power adapter	5V DC incl. AC/DC power adapter	12V DC incl. AC/DC power adapter
259 x 147.4 x 21	200 x 117.6 x 40	200 x 152.6 x 39.8	118 x 101 x 23.6	179.5 x 112.5 x 39.5
Win10/Linux	Win10/Linux	Win10	Android 4.4	Android 7.1

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# **Box Computer**

#### Multi-display Computing System Model NDiS B866 NDiS V1100 NDiS V1000 AMD Ryzen™ Embedded 6th Gen Intel® Core™ Intel® Core™ i5-1145G7E/ CPU Intel<sup>®</sup> Core™ i3-1115G4E (socket type W) V1605B Quad Core Chipset Intel Q170 PCH AMD Radeon™ E8870 Graphics AMD Radeon™ Vega 8 Intel® Iris® Xe Graphics 4 x DDR4 SO-DIMM, 2 x DDR4 SO-DIMMm, 2 x DDR4 SO-DIMM, Memory up to 64GB up to 32GB up to 32GB Gigabit LAN WLAN Hard Disk Interface 2 x 2.5" SATA M.2 2280 Key M (SATA/PCle x4) M.2 2242/2280 Key M (SATA/PCIe x4) M.2 2242/2280 Key M Flash Storage (SATA) **Display Output** 6 x HDMI 2.0 4 x HDMI 2.0 4 x HDMI 2.0 Display Resolution Max. 3840 x 2160 4096 x 2160 4096 x 2160 6 independent, 4 independent, 4 independent, **Output Channel** expanded or clone expanded or clone expanded or clone Hardware decode: 5K60 10b 4:4:4 Hardware decode: HEVC/VP9/SCC H.264, H.265/HEVC (8-bit), Video Capability Hardware decode: 8K60 12b 4:2:0 MPEG1, MPEG2, VC, H.264 H.265/HEVC (10 bit), (Hardware Decode) HEVC/VP9/SCC VP8, VP9, VC-1, AVC, JPEG 8K30 10b 4:2:0 AV11 4K60 8b 4:2:0 AVC 1 x S/PDIF, 1 x MIC-in, 1 x MIC-in, 1 x Mic-inc, **Audio Output** 1 x Line-out 1 x Line-out 1 x Line-out 1 x RS232/422/485 1 x RS232/422/485 COM Port 3 x RS232 (internal) 1 x RS232 USB 2.0 N/A 2 (internal) 4 (internal) USB 3.0 1 x mini-PCle 1 x M.2 1630/2230 Key E **Expansion Slot** 1x M.2 2230 Key E 1x M.2 2230 Key E 0°C to 40°C 0°C to 40°C 0°C to 45°C Operating Temp. DC Input 300W ATX power supply 12V DC 12V DC Dimension 428 x 344 x 44 190 x 200 x 54.4 190 X165 X 48 W x D x H (mm) **OS Support** Win7/Win8.1/Win10/Linux Win10/Linux Win10/Linux

# **Touchscreen Computer**

Embedded Touchscreen Computer (Intel® Celeron®)					
Model	XPPC 10-100	XPPC 16-100	XPPC16-101	XPPC 22-100	XPPC 24-100
CPU	Intel <sup>®</sup> Celeron <sup>®</sup> J3455 Quad Core, 1.50 GHz	Intel® Celeron® J3455 Quad Core, 1.50 GHz	Intel® Celeron® J3455 Quad Core, 1.50 GHz	Intel® Celeron® J3455 Quad Core, 1.50 GHz	Intel® Celeron® J3455 Quad Core, 1.50 GHz
LCD Size	10.1", 16:10	15.6", 16:9	15.6", 16:9	21.5", 16:9	23.8", 16:9
Max Resolution	WXGA, 1280 x 800	WXGA, 1366 x 768	FHD, 1920 x 1080	FHD, 1920 x 1080	FHD, 1920 x 1080
Touch Screen	10-point P-Cap	10-point P-Cap	10-point P-Cap	10-point P-Cap	10-point P-Cap
Touch Light	90%	90%	90%	90%	90%
Transmission			1 - 1 - 1		
Luminace (cd/m2)	Panel : 400 XPPC touch : 360	Panel : 500 XPPC touch : 450	Panel : 450 XPPC touch : 405	Panel : 250 XPPC touch : 225	Panel : 350 XPPC touch : 315
Contrast Ratio	800	600	700	1000	1000
LCD Color	16.7M	16.7M	16.7M	16.7M	16.7M
Viewing Angle	89(U), 89(D), 89(L), 89(R)	160(H), 150(V)	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED	LED	LED	LED
Memory	1 x DDR3L SO-DIMM 8GB max.	1 x DDR3L SO-DIMM 8GB max.	1 x DDR3L SO-DIMM 8GB max.	1 x DDR3L SO-DIMM 8GB max.	1 x DDR3L SO-DIMM 8GB max.
Storage	M.2 2242 Key M	M.2 2242 Key M	M.2 2242 Key M	M.2 2242 Key M	M.2 2242 Key M
2nd Display	HDMI 2.0	HDMI 2.0	2 x HDMI 1.4	HDMI 2.0	HDMI 2.0
Gigabit LAN	2	2	2	2	2
USB 2.0	-	-	2	-	-
USB 3.0	2	2	2	2	2
COM Port	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485	1 x RS232/422/485
Expansion	1 x mini-PCIe 1 x Sim card slot	1 x mini-PCIe 1 x Sim card slot	1 x mini-PCIe 1 x Sim card slot	1 x mini-PCIe 1 x Sim card slot	1 x mini-PCIe 1 x Sim card slot
Housing Material	Metal	Metal	Metal	Metal	Metal
Mounting	VESA 75 x 75mm, Panel mount (optional kit), Open frame (optional kit)	VESA 100 x 100mm, Panel mount (optional kit), Open frame (optional kit)	VESA 100 x 100mm Panel Mount (Optional kit), Open Frame (Optional kit)	VESA 100 x 100mm, Panel mount (optional kit), Open frame (optional kit)	VESA 100 x 100mm, Panel mount (optional kit), Open frame (optional kit)
Power Input	19V DC	19V DC	19V DC	19V DC	19V DC
Power Adapter	45W AC/DC power adapter with lock type	90W AC/DC power adapter with lock type	90W AC/DC power adapter with lock type	90W AC/DC power adapter with lock type	90W AC/DC power adapter with lock type
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Operating Humidity	10%~90% non-condensing	10%~90% non-condensing	10%~90% non-condensing	10%~90% non-condensing	10%~90% non-condensing
IP Level	IP65 on the front	IP65 on the front	IP65 on the Front	IP65 on the front	IP65 on the front
Certification	CE: EN55032/35 FCC Class A	CE: EN55032/35 FCC Class A	CE: EN55032/35 FCC Class A	CE: EN55032/35 FCC Class A	CE: EN55032/35 FCC Class A
Cut-out Size (W x H) (mm)	246.5 x 164.5 (horizontal)	370.5 x 240 (horizontal)	370.5 x 240 (horizontal)	508 x 303 (horizontal)	546.7 x 326.1 (horizontal)
Dimenssion (W x H x D) (mm)	260.3 x 178.3 x 44.7 (horizontal)	382.2 x 251.4 x 51.9 (horizontal)	382.2 x 251.4 x 51.9 (horizontal)	520.6 x 315.6 x 54 (horizontal)	557 x 336.7 x 55 (horizontal)
00 00000	Win10/Linux	Win10/Linux	Win10 / Linux	Win10/Linux	Win10/Linux
OS Support	TTITT OF EITTOX				

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# Touchscreen Computer

# Embedded Touchscreen Computer (Intel® Core™)

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VDDC 10 000	VDDC 1/		

Model		A CONTRACTOR OF THE PARTY OF TH
	XPPC 10-200	XPPC 16-200
СРИ	Intel® Core™ i5-1145G7E Intel® Core™ i3-1115G4E	Intel® Core™ i5-1145G7E Intel® Core™ i3-1115G4E
LCD Size	10.1", 16:10	15.6", 16:9
Max Resolution	WXGA, 1280 x 800	FHD, 1920 x 1080
Touch Screen	10-point P-Cap	10-point P-Cap
Touch Light Transmission	90%	90%
Luminace (cd/m2)	Panel : 400 XPPC touch : 360	Panel : 450 XPPC touch : 405
Contrast Ratio	800	700
LCD Color	16.7M	16.7M
Viewing Angle	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED
Memory	1 x DDR4 SO-DIMM 32GB max.	1 x DDR4 SO-DIMM 32GB max.
Storage	M.2 2280 Key M PCIe	M.2 2280 Key M PCIe
2nd Display	HDMI 2.0	HDMI 2.0, DP++
Gigabit LAN	2	2
USB 3.0	4	4
COM Port	1 x RS232/422/485	1 x RS232/422/485
Expansion	1 x M.2 2230 Key E	1 x M.2 2230 Key E
Housing Material	Metal	Metal
Mounting	VESA 75 x 75mm, Panel mount (optional kit), Open frame (optional kit)	VESA 100 x 100mm, Panel mount (optional kit), Open frame (optional kit)
Power Input	12V DC	12V DC
Power Adapter	60W AC/DC power adapter with lock type	96W AC/DC power adapter with lock type
Operating Temp.	0°C to 50°C	0°C to 50°C
Storage Temp.	-20°C to 60°C	-20°C to 60°C
Operating Humidity	10%~90% non-condensing	10%~90% non-condensing
IP Level	IP65 on the front	IP65 on the front
Certification	CE: EN55032/35 FCC Class A	CE: EN55032/35 FCC Class A
Cut-out Size (W x H) (mm)	246.5 x 164.5 (horizontal)	370.5 x 240 (horizontal)
Dimenssion (W x H x D) (mm)	260.3 x 178.3 x 50.4 (horizontal)	382.2 x 251.4 x 51.9 (horizontal)
OS Support	Win10/Linux	Win10/Linux
Net Weight	2 kg	3 kg

# **Embedded Computing Board**

# Embedded Computing Board



A Property
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	X100
Туре	3.5
СРИ	Intel® Celeron® N3350 Intel® Celeron® J3455
Chipset	-
Graphics	Intel® HD 500 Graphics
Memory	1 x DDR3L SO-DIMM 8GB max.
Gigabit LAN	2
WLAN	Optional
Hard Disk Interface	-
Flash Storage	M.2 M-key 2242 (SATA)
Display Output	2 x HDMI2.0 1 x LVDS
Display Resolution Max.	4096 x 2160 60Hz
Video Capability (Hardware Decode)	Hardware decode:HEVC (H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG
Audio Output	1 x Line-out pin header
COM Port	1 x RS232/422/485 1 x RS232 (pin header)
USB 2.0	4 (Internal)
USB 3.0	2
Expansion Slot	1 x Mini-PCle (SIM socket)
Operating Temp.	-5°C to 60°C
DC Input	12V / 19V DC
Dimension W x D x H (mm)	146 x 102













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X101	X200	X300	X302	V1000	V1100
3.5"	3.5"	minilTX	minilTX	minilTX	Epic
Intel® Celeron® J3455	11th Gen Intel <sup>®</sup> Core™ (SoC, 15W)	8th Gen Intel® Core™ (socket, 35W)	8th/9th Gen Intel® Core™ (socket, up to 65W)	AMD Ryzen™ V1605B Quad Core	Intel <sup>®</sup> Core™ i5-1145G7E Intel <sup>®</sup> Core™ i3-1115G4E
-	-	Intel® Q370 /H310 PCH	Intel® Q370 /H310 PCH	-	-
Intel <sup>®</sup> HD 500 Graphics	Intel® HD 630 Graphics on i3, Intel® Iris® X° Graphics on i5	Intel <sup>®</sup> UHD Graphics 630	Intel <sup>®</sup> UHD Graphics 630	AMD Radeon Vega 8	Intel <sup>®</sup> Iris <sup>®</sup> X <sup>e</sup>
1 x DDR3L SO-DIMM 8GB max.	1 x DDR4 SO-DIMM	2 x DDR4 SO-DIMM 32GB max.	2 x DDR4 SO-DIMM 32GB max.	2 x DDR4 SO-DIMM, up to 32GB	2 x DDR4 SO-DIMM, up to 32GB
2	2	2	2	2	2
Optional	Optional	Optional	Optional	Optional	Optional
-	-	1 x 2.5" SATA	2 x 2.5" SATA	-	-
M.2 2242 Key M (SATA)	M.2 2242/2280 Key M (PCIe x4)	M.2 2280 Key M (SATA/PCIe x4)	M.2 2242/3042 Key B (if 3G/4G module not in use)	M.2 2242/2280 (SATA)	M.2 2280 Key M (SATA/PCIe x4)
2 x HDMI1.4 1 x eDP (optional: LVDS)	1 x DP++ 1 x HDMI2.0 1 x eDP	3 x HDMI2.0 (Q370) 2 x HDMI2.0 (H310) 1 x LVDS (H310)	1 x VGA 1 x HDMI1.4 1 x LVDS (Internal)	4 x HDMI2.0	4 x HDMI 2.0
3840 x 2160 30Hz	4096 x 2304 60Hz	4096 x2160 60Hz	4096 x2160 30Hz	4096 x 2160 60Hz	4096 x 2160 60Hz
Hardware decode: HEVC (H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG	Hardware decode: AV1, VP9 8/10/12bit, H.265/HEVC 8/10/12 bit, H.264/AVC, MPEG2	Hardware decode: MPEG-2 (H.262), MPEG-4 (H.264), JPEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9	Hardware decode: MPEG-2 (H.262), MPEG-4 (H.264), JPEG/MJPEG, HEVC (H.265), VC-1, VP8, VP9	Hardware decode: H.264, H.265/ HEVC (8-bit), H.265/HEVC (10-bit), VP8, VP9, VC-1, AVC, JPEG	Hardware decode: H.264, H.265/ HEVC (8-bit), H.265/HEVC (10-bit), VP8, VP9, VC-1, AVC, JPEG
1 x Line-out pin header 1 x Mic-in pin header 1 x Speaker pin header	1 x Line-out pin header 1 x Mic-in pin header 1 x Speaker pin header	1 x Line-out 1 x Mic-in pin header	1 x Line-out 1 x Mic-in 1 x Speaker (pin header)	1 x MIC-in, 1 x Line-out	1 x MIC-in, 1 x Line-out
1 x RS232/422/485 1 x RS232 (pin header)	1 x RS232/422/485 (pin header) 1 x RS232 (pin header)	1 x RS232/422/485 (pin header) 2 x RS232 (pin header)	3 x RS232/422/485 3 x RS232 (pin header)	1 x RS232/422/485 3 x RS232 (pin header)	1 x RS232/422/485 1 x RS232
2 (edge) 2 (pin header)	4 (pin header)	6 x for Q370 (pin header) 4 x for H310 (pin header)	6 (pin header, Q370) 4 (pin header, H310)	2 (pin header)	4 (internal) 1 (edge)
2	4	4	4	4	3
1 x mini-PCle (SIM socket)	1 x M.2 2230 Key E	1 x M.2 2230 Key E, 1x PCle x16	1 x M.2 2230 Key E, 1 x PCle x16	1 x M.2 2230 Key E, 1 x PCle x8	1 x M.2 3052 Key B, 1 x mini-PCIe
-5°C to 60°C	-20°C to 60°C	-5°C to 60°C	-5°C to 60°C	0°C to 60°C	0°C to 60°C
12C/19V DC	12V DC	12V DC	12V DC	12V DC	12V DC
146 x 102	146 x 102	170 x 170	170 x 170	170 x 170	165 x 114
Win10/Linux	Win10/Linux	Win10/Linux	Win10/Linux	Win10/Linux	Win10/Linux

Win10 / Linux

SELECTION GUIDE

# Modular PC

#### OPS Smart Display Computer Model NDiS M535 NDiS M537 NDiS M538 NDiS M538H 0PS 0PS+ OPS 0PS Type 6th Gen Intel<sup>®</sup> Core™ 7/6th Gen Intel® Core™ 8th Gen Intel® Core™ 8th Gen Intel<sup>®</sup> Core™ CPU i5-6440EQ/i7-6820EQ (socket, 35W) (socket, 35W) (socket, 35W) Intel® QM170 PCH Intel® QM170 PCH Intel® Q370 PCH Intel® Q370 PCH Chipset Graphics Intel® HD Graphics 530 Intel® UHD Graphics 600 Intel® HD Graphics 630 Intel® HD Graphics 630 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM 2 x DDR4 SO-DIMM, 2 x DDR4 SO-DIMM, Memory 32GB max. 32GB max. up to 32GB up to 32GB Gigabit LAN WLAN Optional Hard Disk Interface 1 x 2.5" SATA M.2 2242 Key M M.2 2280 Key M M.2 2280 Key M Flash Storage (SATA) (SATA/PCIe x4) (SATA/PCIe x4) 1 x HDMI 2.0 1 x Mini DP 1 x DP 1 x TMDS (HDMI 2.0) 1 x HDMI 1 x TMDS (HDMI 2.0) (via JAE connector) 1 x Mini DP, 1 x TMDS(HDMI 2.0) **Display Output** 1 x TMDS (HDMI2.0) (via JAE connector) (via JAE connector) (via JAE connector) 1 x DP (via FX18) Display Resolution Max. 3840 x 2160 3840 x 2160 3840 x 2160 3840 x 2160 Hardware decode: Hardware decode: Hardware decode: Hardware decode: MPEG-2 (H.262), MPEG-2 (H.262), "Video Capability MPEG2,VC1, VP8, MPEG2,VC1, VP9, MPEG-4(H.264),J MPEG-4(H.264),J (Hardware Decode)" H.264, H/265 H.264, H/265 PEG/MJPEG, HEVC(H.265), PEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9 VC-1, VP8, VP9 1 x Mic-in, 1 x Line-out, 1 x Mic-in, 1 x Line-out, 1 x Line-out 1 x Line-out **Audio Output** 1 x Line-out 1 x Line-out 1 x Line-out 1 x Line-out (via JAE connector) (via JAE connector) (via JAE connector) (via JAE connector) 1 x RS232 (COM2) 1 x RS232 (COM2) 1 x RS232 (COM2) 1 x TX/RX **COM Port** 1 x TX/RX 1 x TX/RX 1 x TX/RX (via JAE connector) (via JAE connector) (via JAE connector) (via JAE connector) 1 x edge 2 x edge USB 2.0 2 x via JAE connector 2 x edge 2 x edge 2 x edge 2 x edge USB 3.0 1x via JAE connector 1 x M.2 2230 Key E 1 x mini-PCle 1 x M.2 2230 Key E 1 x M.2 2230 Key E Expansion Slot 0°C to 45°C 0°C to 45°C 0°C to 45°C 0°C to 45°C Operating Temp. 12-19V DC 12-19V DC 12-19V DC 12-19V DC **Power Type** (via JAE connector) (via JAE connector) (via JAE connector) (via JAE connector) Dimension 200 x 119 x 30 W x D x H (mm) Win7/Win8.1/WES8/ Win10/Linux Win10/Linux Win10/Linux **OS Support** Win10/Linux

# **Edge Al Computer**

Smart Display Module	Edge Al Computer			
	Model			
NDiS S538		AlEdge-X®300	AlEdge-X®300- RTX30	AlEdge-X <sup>®</sup> 500
SDM-L	CPU	8th Gen Intel® Core™ (socket, 65W max.)	8th Gen Intel® Core™ (socket, 65W max.)	8th/9th Gen Intel® Core™ (socket, 95W max.)
8th Gen Intel® Core™ (socket, 35W)	Chipset	Intel® Q370 PCH	Intel <sup>®</sup> Q370 PCH	Intel <sup>®</sup> Q370 PCH
Intel® Q370 PCH	Graphics	Intel® UHD Graphics 630	Intel® UHD Graphics 630	Intel® UHD Graphics 630
Intel <sup>®</sup> HD Graphics 630	Memory	DDR4 SO-DIMM, up to 32GB	DDR4 SO-DIMM, up to 32GB	DDR4 SO-DIMM, up to 32GB
2 x DDR4 SO-DIMM, up to 32GB	Gigabit LAN	2	2	2
1	WLAN	Optional	Optional	-
-	Hard Disk Interface	1 x 2.5" SATA	1 x 2.5" SATA	4 x 2.5" SATA (Hot-Swap)
-	Flash Storage	M.2 2280 Key M (SATA/PCIe x4)	M.2 2280 Key M (SATA/PCIe x4)	M.2 2280 Key M (SATA/PCIe x4)
M.2 2280 Key M (SATA/PCIe x4)	Display Output	3 x HDMI 2.0	3 x HDMI 2.0	1 x HDMI 2.0
1 x HDMI 1 x TMDS (HDMI 2.0)	Display Resolution Max.	4096 x 2160	4096 x 2160	4096 x 2160
(via JAE connector).  3840 x 2160  Hardware decode: MPEG-2 (H.262),	Video Capability (Hardware Decode)	Hardware decode: MPEG-2 (H.262), MPEG-4(H.264), JPEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9	Hardware decode: MPEG-2 (H.262), MPEG-4[H.264], JPEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9	Hardware decode: MPEG-2 (H.262), MPEG-4(H.264), JPEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9
MPEG-4(H.264), JPEG/MJPEG, HEVC(H.265), VC-1, VP8, VP9	Audio Output	1x Line-out	1x Line-out	1x Line-out
1 x Line-out 1 x Line-out (via JAE connector)	COM Port	1 x RS232 1 x RS232/422/485 1 x RS232 (internal)	1 x RS232 1 x RS232/422/485 1 x RS232 (internal)	1 x RS232/422/485 3 x RS232 (internal)
1 x RS232 (COM2) 1 x TX/RX	USB 2.0	4 (internal)	4 (internal)	1 6 (internal)
(via JAE connector)  2 x edge	USB 3.0	4	4	2
2 x via JAE connector  2 x edge 1 x via JAE connector	Expansion Slot	M.2 2230 Key E 1 x PCIe x16, two slot space	M.2 2230 Key E 1 x PCle x16, two slot space	1 x PCIe x16, two slot space 1 x PCIe x4 slot 1 x PCI slot
1 x M.2 2230 Key E	Add-on Card Length (mm)	204mm max.	290mm max.	327mm max.
0°C to 45°C	Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C
12-19V DC (via JAE connector)	Power Type	500W ATX power supply	850W ATX power supply	800W ATX power supply
200 x 119 x 30	Dimension W x D x H (mm)	360 x 250 x 85	360 x 335 x 85	290 x 360 x 150
Win10 / Linux	OS Support	Win10/Linux	Win10/Linux	Win10/Linux

# **About NEXCOM**

# Reliable Partner for the Intelligent Solutions — Committed to Customer Success

Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being your trustworthy partner in building the intelligent solutions. To surpass customers' expectations, NEXCOM makes the difference by utilizing its decades of industrial computing experience, a highly talented R&D team, and by providing exceptional levels of customer service. With these core strengths, NEXCOM has enabled its customers to win key projects in a diverse range of industries.

With its focus on delivering these core values to better serve customers, NEXCOM integrates its capabilities and operates six global businesses, which are IoT Automation Solutions, Intelligent Video Security, Intelligent Platform @ Smart City, Mobile Computing Solutions, Medical

and Healthcare Informatics, Network and Communication Solutions. This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and service without compromising cost.

In addition, the service-to-market business model gives NEXCOM core competence to build a strong world-class service network by providing customized service, global logistics, local access, and real-time support. Operating six subsidiaries, from China, Japan, Taiwan, the United

States, to the United Kingdom, NEXCOM is able to better facilitate customers' requirements as well as closely work with global partners in different regions.

Partners should also be assured that NEXCOM's Taiwan based Headquarters and subsidiary offices in China, UK and USA have obtained ISO 9001:2008



IoT Automation Solutions: Industrial Automation & I4.0 Execution, Intelligent Edge, Gateway & EWR, IAS Industrial Robot Control, EtherCAT Motion Solutions, Wireless & Embedded Solutions for Industrial IoT Intelligent Video Surveillance: IP Video Surveillance Cameras, Mobile Cameras, ANPR/LPR Network Cameras, **IDS** Panoramic Cameras, NVR Server Platform Intelligent Platform @ Smart City: Smart City, Smart Retail, Digital Signage, Interactive Kiosks, Hospitality, Gateway, **IPS** Edge AI, and ODM Customization Services Mobile Computing Solutions: Edge AI Telematics Computer, Vehicle Telematics Computer, Railway Computer, **MCS** Vehicle Mount Computer, Vehicle Mount Display, In-Vehicle Networking, In-Vehicle HDMI Extender over IP MHI Medical and Healthcare Informatics: Total Solutions with a Variety of Medical IT Systems NCS Network and Communication Solutions: Cyber Security, HPC, Telecommunications, Storage, SDN/NFV, 5G, uCPE, ICS Security

# Corporate Vision

To become the industrial leader in providing intelligent solutions, NEXCOM utilizes its industry leading technology, localized customer support and worldwide logistics services. This will be achieved by:

- Great team wor
- Cooperation with trusted partners
- Growth through innovation

# Corporate Mission

- An innovative supplier in vertical application markets
- A quality partner in engineering, manufacturing and services

# Business Strategy

Aim to better support the activities of all its partners, NEXCOM divides its sales force into eight dedicated business units to target rapidly expanding vertical markets. This enhances each business unit concentrating on strategic channel accounts and on repeat order business. Moreover, NEXCOM's business units have been set up to serve the requirements of key project accounts, where product ODM and project support are frequently required.

NEXCOM is working with embedded computing solution providers to envision new opportunities for growth. We'll help you deliver reliable vertical solutions, optimized for the next wave of IoT and Industry 4.0 solutions.

## Headquarters

## NEXCOM International Co., Ltd.

9F, No.920, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-8226-7786 Fax: +886-2-8226-7782 www.nexcom.com

#### Asia

#### Taiwan NexAloT Co., Ltd. Taipei Office

13F, No.922, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7796 Fax: +886-2-8226-7926 Email: jacobhuang@nexaiot.com

www.nexaiot.com

# NexAloT Co., Ltd.

16F, No.250, Sec. 2, Chongde Rd., Beitun Dist., Taichung City, 406, Taiwan, R.O.C. Tel: +886-4-2249-1179

Tel: +886-4-2249-1179
Fax: +886-4-2249-1172
Email: jacobhuang@nexaiot.com
www.nexaiot.com

#### NexCOBOT Taiwan Co., Ltd.

13F, No.916, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7786 Fax: +886-2-2886-7726 Email: jennyshern@nexcobot.com www.nexcobot.com

## GreenBase Technology Corp.

13F, No.922,Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7786 Fax: +886-2-2886-7900 Email: vivianlin@nexcom.com.tw www.nexcom.com.tw

## DivioTec Inc.

19F-1A, No.97, Sec. 4, ChongXin Rd., Sanchong Dist., New Taipei City, 24161 Taiwan, R.O.C Tel: +886-2-8976-3077 Email: sales@diviotec.com www.diviotec.com

# AloT Cloud Corp.

13F, No.922, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7786 Fax: +886-2-2886-7982 Email: alantsai@aiotcloud.net www.aiotcloud.dev

#### EMBUX Technology Co., Ltd.

13F, No.916, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7786 Fax: +886-2-2886-7982 Email: info@embux.com www.embux.com

## TMR Technologies Co., Ltd.

13F, No.916, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C. Tel: +886-2-2886-7786 Fax: +886-2-2886-7782 Email: services@tmrtek.com www.tmrtek.com

## China

#### **NEXSEC Incorporated**

201, Floor 2, Unit 2, Building 15, Yard 3, Gaolizhang Rd., Haidian District, Beijing, 100094, China Tel: +86-10-5704-2680 Fax: +86-10-5704-2681 Email: marketing@nexsec.cn www.nexsec.cn

## **NEXCOM Shanghai**

Room 406-407, Building C, No 154, Lane 953, Jianchuan Road, Minhang District, Shanghai, 201108, China Tel: +86-21-5278-5868 Fax: +86-21-3251-6358 Email: sales@nexcom.cn www.nexcom.cn

#### NEXCOM Surveillance Technology Corp.

Floor 8, Building B3, Xiufeng Industrial Zone, GanKeng Community, Buji Street, LongGang District, ShenZhen, 518112, China Tel: +86-755-8364-7768 Fax: +86-755-8364-7738 Email: steveyang@nexcom.com.tw www.nexcom.cn

## **NEXGOL Chongqing**

1st Building No.999, Star Boulevard, Yongchuan Dist., Chongqing City, 402160, China Tel: +86-23-4960-9080 Fax: +86-23-4966-5855 Email: sales@nexgol.com.cn

#### Beijing NexGemo Technology Co.,Ltd.

Floor 2, Gemotech Building, No.1, Development Rd., Changping International Information Industry Base, Changping District, Beijing,102206, China Tel: +86-10-8072-2025 Fax: +86-10-8072-2022 Email: sales@nexgemo.cn www.nexgemo.cn

#### Japan NEXCOM Japan

9F, Tamachi Hara Bldg., 4-11-5, Shiba Minato-ku, Tokyo, 108-0014, Japan Tel: +81-3-5419-7830 Fax: +81-3-5419-7832 Email: sales@nexcom-jp.com www.nexcom-jp.com

#### America

# USA

## **NEXCOM USA**

46665 Fremont Blvd Fremont CA 94538, USA Tel: +1-510-656-2248 Fax: +1-510-656-2158 Email: sales@nexcom.com www.nexcom.com

## Еигоре

# United Kingdom NEXCOM EUROPE

10 Vincent Avenue, Crownhill Business Centre, Milton Keynes, Buckinghamshire MK8 0AB, United Kingdom Tel: +44-1908-267121 Fax: +44-1908-262042 Email: sales.uk@nexcom.eu www.nexcom.com



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