

Successful Implementation of Embedded Core Design-in Service

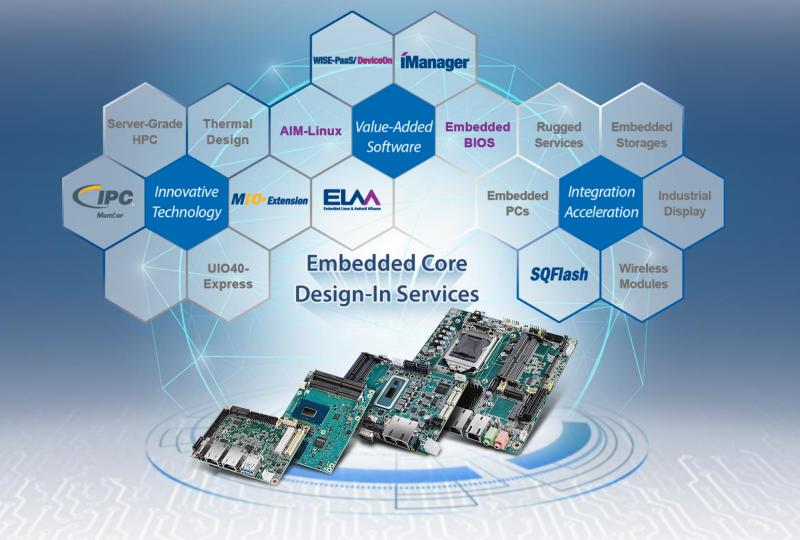
Moderator:

Mark Yang, Senior Director of EloT, Advantech

Panelists:

Avi Nataf, Technologies Managing Director, Nisko Pier Lugi Zenevre, Co-founder, Linari Medical Pawel Surgiel, CEO, Bivrost Sp. z o.o.





Embedded Core Design-In Services

Innovative Technology

Server Grade (COM-HPC)

MI/O Extension (2.5"/3.5")

UIO40-Express (2.5")

Quadro Flow Cooling System (QFCS) **Software Services**

WISE-PaaS/DeviceOn

Embedded Feature API

AIM-Linux / AIM-Android

Embedded BIOS

Integration Acceleration

EPC CTOS

(IMB, Chassis, Peripherals, OS)

Rugged Design Services

(Coating, Wide Temp., Anti-Vibration)

DTOS Services

(Custom Board, I/O, 610G Class 3)

Peripheral Integration

(Wireless, Storage, Display)





SBC













UTX

Mini-ITX

Arm-Based Module Arm-Based SBC

UIO



Paweł Surgiel

Founder @ BIVROST | R&D of emerging media technologies

Warsaw, Masovian District, Poland · 500+ connections



Avi Nataf

Managing Director at Nisko Technologies

Israel · 434 connections · Contact info



Pier Lugi Zenevre

Co-founder, Linari Medical







Pawel Surgiel

Chief Executive Officer

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Bivrost is a product design company that combines cutting-edge hardware and software to empower digital creators industry.

With the background in deep tech engineering, Bivrost develops all-in-one AI-powered sollutions that enables the live production and streaming of high quality content with zero level of professional skill requirement.

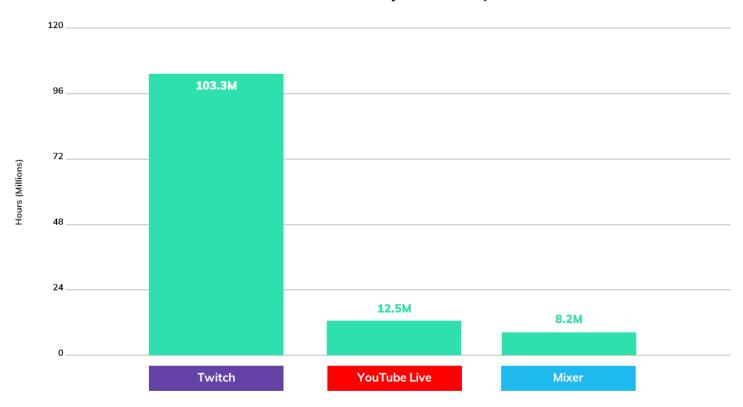


GOAL:

to make an impact on the live streaming industry



Hours Streamed By Platform In Q1'19



Fun facts:

Watching eSports is an industry soon to be worth \$1 billion.

There were 4,463,290 Twitch streamers in March

67% of audiences who watched a live stream purchased a ticket to a similar event the next time it occurred.

85% of u25 people are consuming live content on a mobile device

80% of consumers prefer to watch live videos from a brand than read a blog





Advantech / BIVROST

Cooperation model

- High end carrier board design and manufacturing under a tight schedule
- European project management team and engineering team to support customer locally.
- Advantech Taiwan works in the background to support local engineering capability
- With Carrier board Bivrost also intends to use custom Advantech COMe module based on 6th gen core i7, suggested SQRAM modules, Microsoft licensing and validating also high capacity storage SSD's from Advantech.



Tech specs:

5x M.2 for wide peripheral flexibility with Storage, wireless connectivity and Al

6x USB 3.1 for extreme fast data transmission from the cameras

2x HDMI for visualization

SOM-5899 COMe module equipped with 3x SODIMM and Intel Core i7 Coffee Lake









BIVROST STREAM liteCASTER





BIVROST STREAM liteCASTER



the promise











Paweł Surgiel





Nisko Technologies Opportunities on the Defense and Medical Markets in Israel

Avi Nataf, Nisko Technologies Managing Director







Nisko-Ardan Group

- Since 1970
- Israeli distribution leader in the electronics, communication, defense, industrial, medical and hi-tech sectors.
- ~1,000 employees, out of which 23% are experienced engineers.
- Turnover @ CY2018 : ~500M\$.
- Customer base: Over 500 companies.
- ISO 9001-2008 certificated.



Nisko Technologies in a Glance

Offering unique expertise and extensive experience in embedded technologies including ATCA, CPCI, VPX, small SBCs, ComE & 3.5", Servers & Industrial-Computers by proposing Full Turn Key Integrated Systems



Medical System



Custom Full System ComE



Embedded PC for C4I System





The Main Players in Israeli Defense Market



Annual Revenue: \$3.7B

Employees: 12,470

Founded: 1967

Elbit develops,
manufactures and
integrates electronic,
communication and
electro-optic systems for
defense and aviation
sectors



Annual Revenue: \$2.9B

Employees: 7,500

Founded: 1948

Rafael designs and manufactures defense systems for air, land, sea and space applications.



Annual Revenue: \$3.5B

Employees: 15,800

Founded: 1953

Israel Aerospace
Industries is engaged in the development and production of systems for the defense and commercial markets..

The Israeli Defense Market's Needs



- Rugged Solution: memory soldered down, IPC Class 3,
- Custom BIOS: Quick boot time,
- Conformal Coating
- **Extend Temperature Range:** -40~ 85°C
- **Security Features** : AES encryption, HW & SW secure erase
- □ Locked BOM & Change Notification: at least 6 months ahead.
- Longevity:7+ years

All these needs can be achieved from Advantech by the SSD and ComE Product lines.





SkEye Project





Background

Developing a system which capable of continuously monitoring vast areas, intercept events and maintain multiple regions of interest (ROI) under constant surveillance, with high spatial resolution. Storage Unit – Include 34 SSDs

SQF-S25M8

Ruggedness & Security

- -40~ 85°C wide temp. support
- AES-256 Encryption

Quick Services

- Close relationship & good support
- Quick availability of samples

SW Support

- SW secure erase
- Real-time VxWorks OS support

SQ Manager Inside



Endoscoy System



Background

A start-up company with uniquely patented in the world of miniaturizing visual fiber-optics, providing the only ultra-thin, high resolution, extremely flexible, single-use endoscopic platform based

AIMB-586 with Chassis

Customized Services

- Custom USB connector with secured limited access
- 3rd party SW solution for data security

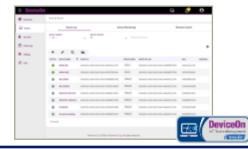
Quick Support

- Close relationship & good support
- Professional engineering consultation on earlier stage

Longevity Support

- 7+ years longevity support
- Medical grade PSU

Bundle with DeviceOn





Linari

Pier Lugi Zenevre, Co-founder, Linari Medical







LINKOU CAMPUS, TAIPEI – DEC 13,2019



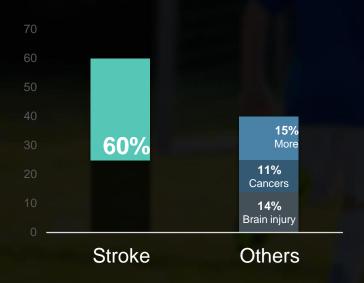
PIONEERS IN NEUROVISUAL REHABILITATION





STROKE

Main Hemianopsia cause



HEMIANOPSIA

Visual deficit

NEW CASES DIAGNOSED **EACH YEAR**



1TALY 25.000

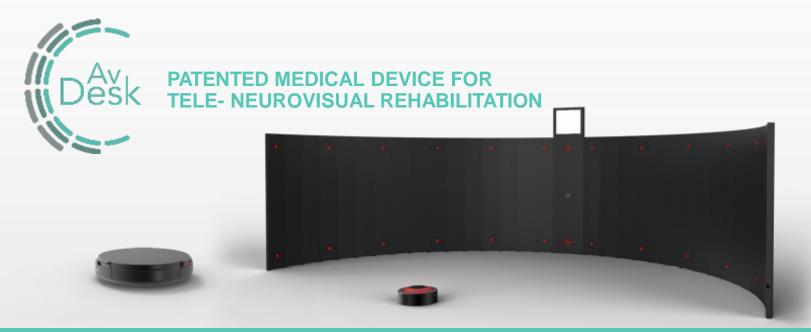


EUROPE 228.000



GLOBAL 2.475.000





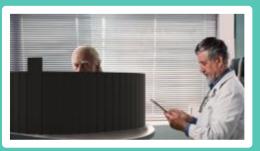
Simple Mobility



At home

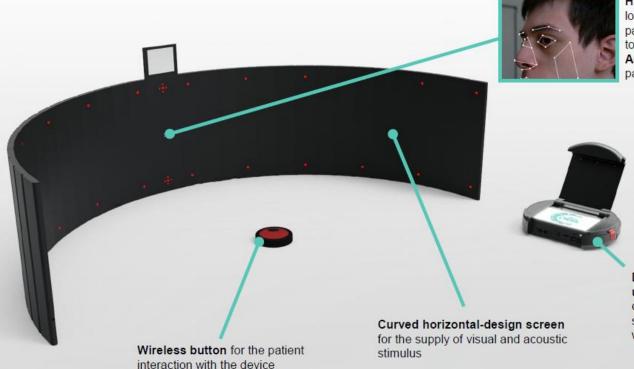


In medical clinic





AVDESK COMPONENTS



High resolution camera, suitable to the low light view, integrated in the central panel of the curve screen and connected to the data collection unit. It uses the Artificial Intelligence to control the patient position during the therapy.

Data collecting and elaboration unit with proprietary software and cloud service. Equipped with touch screen display for the interaction with the system





First Results after just

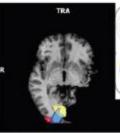
20 h

of personalized therapy

Brain MRI

before training

After training







Quadrants

UNCONSCIOUS VISION









ADVANTECH

Our Needs

Resistence

for hundreds of

flights





Centered cloud managing for partners and costumers support





High Calculation
Power
for Ai support





Small in size and weight

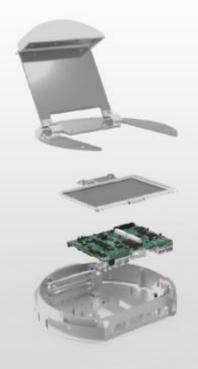


Silent operativity with SSD and fanless





MIO-5272U







High Performance Processor



High Speed Connectivity



Resistence



Silence

MIO-5272U-U4A1E

Embedded computer board

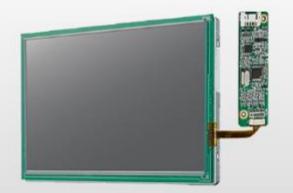
High calculation power to support the Ai, to monitor the patient in real time and to guarantee the therapeutic adherence





ADV-IDK-1107WR









IDK-1107WR-50WSA1E

Touch 7" LCD module

High quality component to be used by visually-impaired patients at home, without the medical support and accidental impact resistent





WISE-PaaS/DeviceOn



Device managment



Real Time Monitoring



Software Update

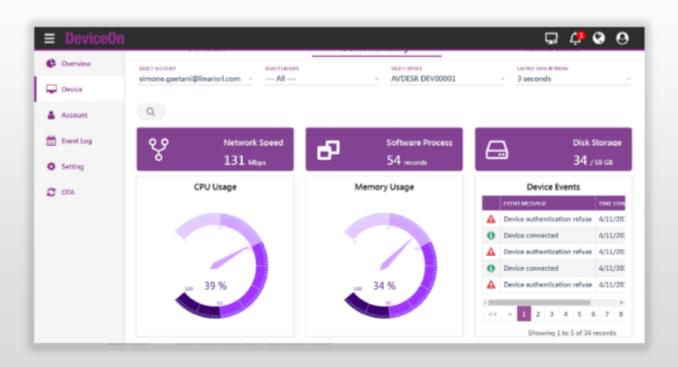
DeviceOn on Microsoft Azure Cloud Managing Platform

A unique access point to all required functionalities for the remote control of the patient. Software updates of devices via platform





USE CASE: DeviceOn and AvDesk





scores a

GOAL!

with

ADVANTECH











Scientific Partner



Partner

Leading Embedded Core Innovation & Design-in Services

Time to Market **Leading Innovation Design-in Service** Industrial Motherboards Computer On Module **Embedded Single Boards Computers Arm-Based Computing Platforms Industrial Flash & Memory Embedded PCs** Embedded Software **Embedded Wireless Module**

Co-Creating the Future of the IoT World

