

Building an Open Standards Ecosystem

Andrew Starks, Macnica

Sponsored Presentation



Who Are We?



MACNICA

A Global Leader

World's **5th**
Largest
Distributor

for Semiconductor and
Electronics Components

Source: Gartner

More than
200
leading edge/
premier suppliers

FY2022 Sales

US\$7B

April 2021 – March 2022

mF Macnica Fuji Electronics



3000+

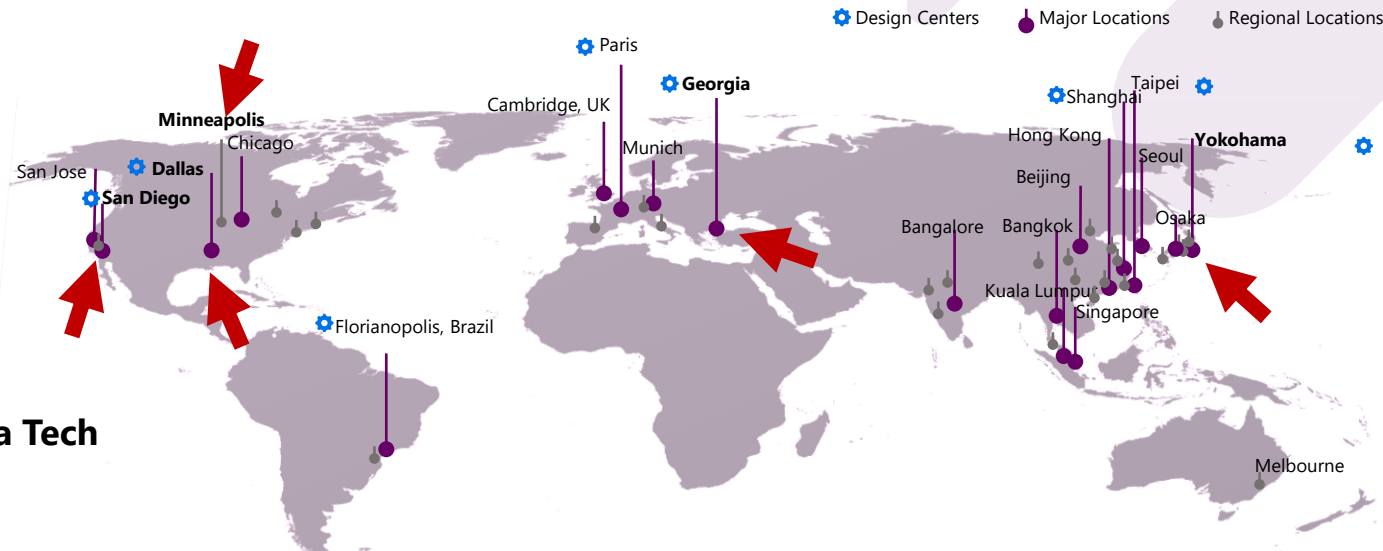
employees

closely supporting customers
from over

80+

locations
worldwide

Macnica Tech



What We Do



Consultative
Demand Creation



Deep
Technical Support



Global
Supply Chain



Solutions
Engineering



High-end
Design Services



**Original Product
Development**

Working with Standards Since 2012



MACNICA standards

AMWA
Alliance for IP Media Solutions
Networked Media. Working.


VIDEO SERVICES FORUM

Working with Standards Since 2012



MACNICA ❤️ standards

SMPTE ST 2022 5/6
SMPTE ST 2110
AMWA NMOS
AIMS IPMX...

Standards

Components
& SDKs

Manufacturers
& Developers

End
Users



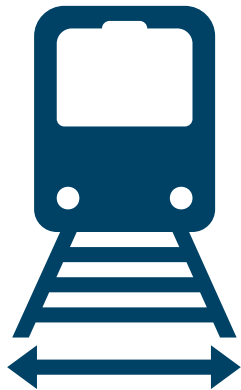
Standards Bring Growth



**Industrial
Revolution**



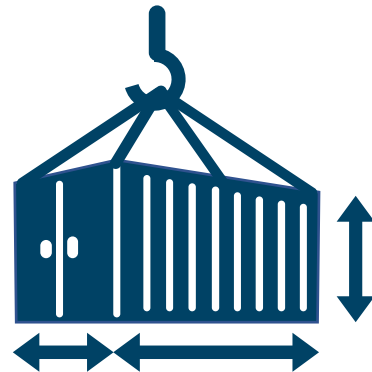
Stephenson Gauge



Globalization



**Intermodal Transport
Containers**



The Information Age



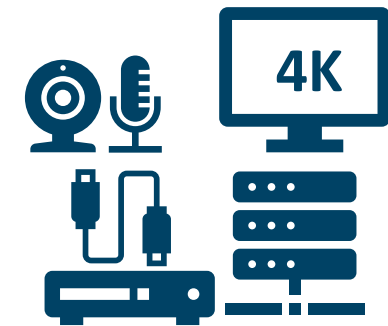
Internet Protocol Suite



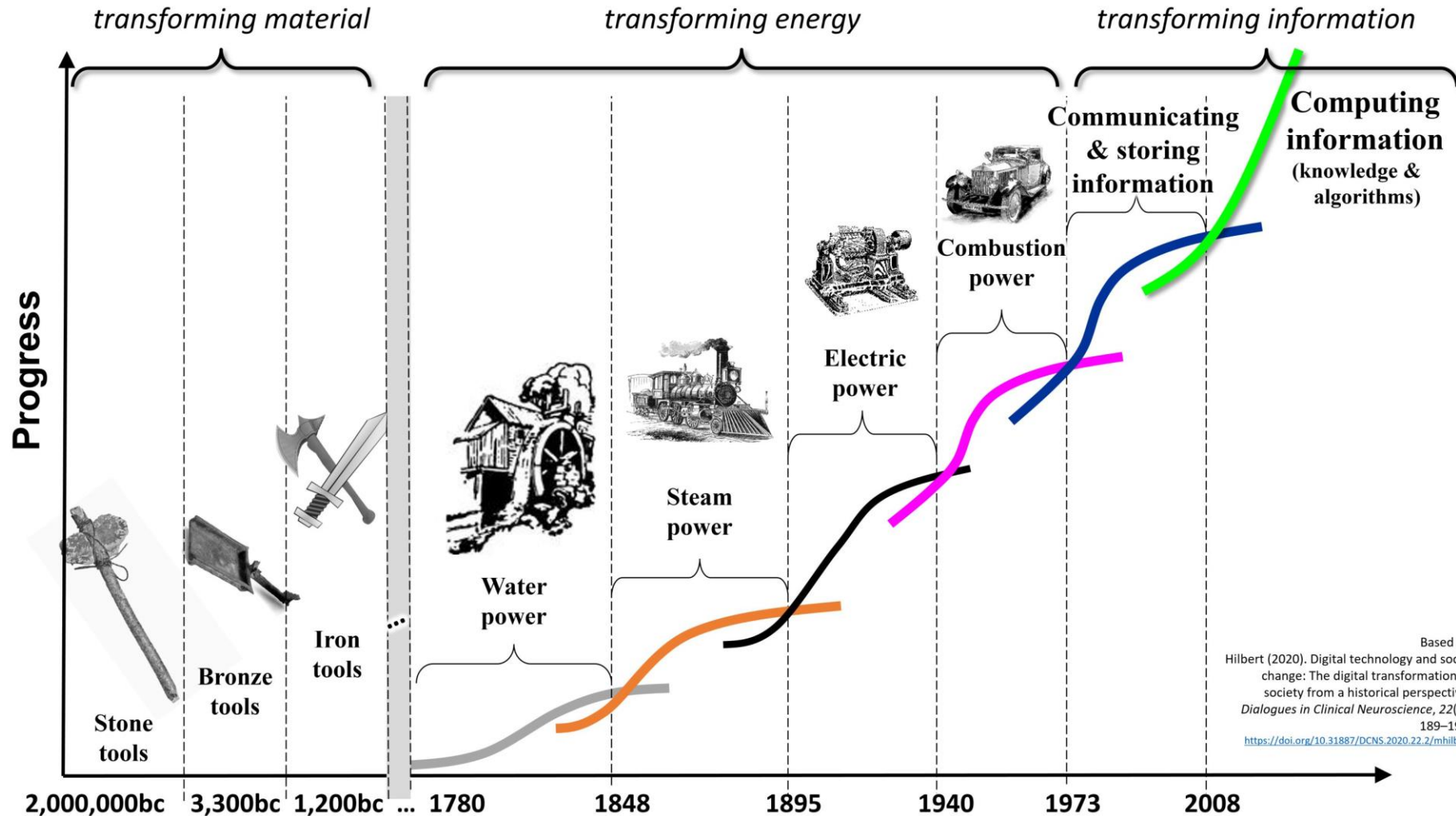
?????



ST 2110 & IPMX

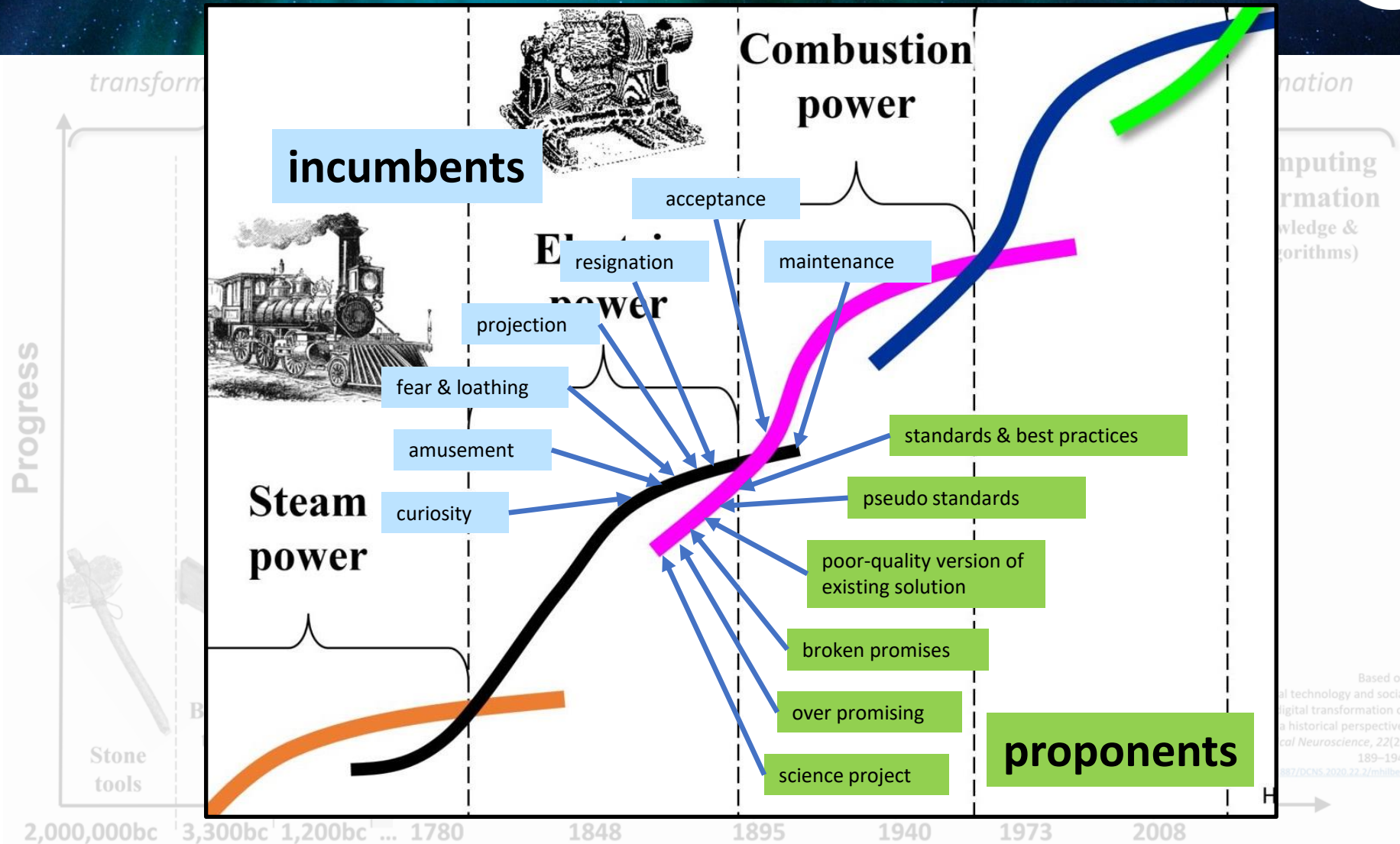


Competing with Open Standards

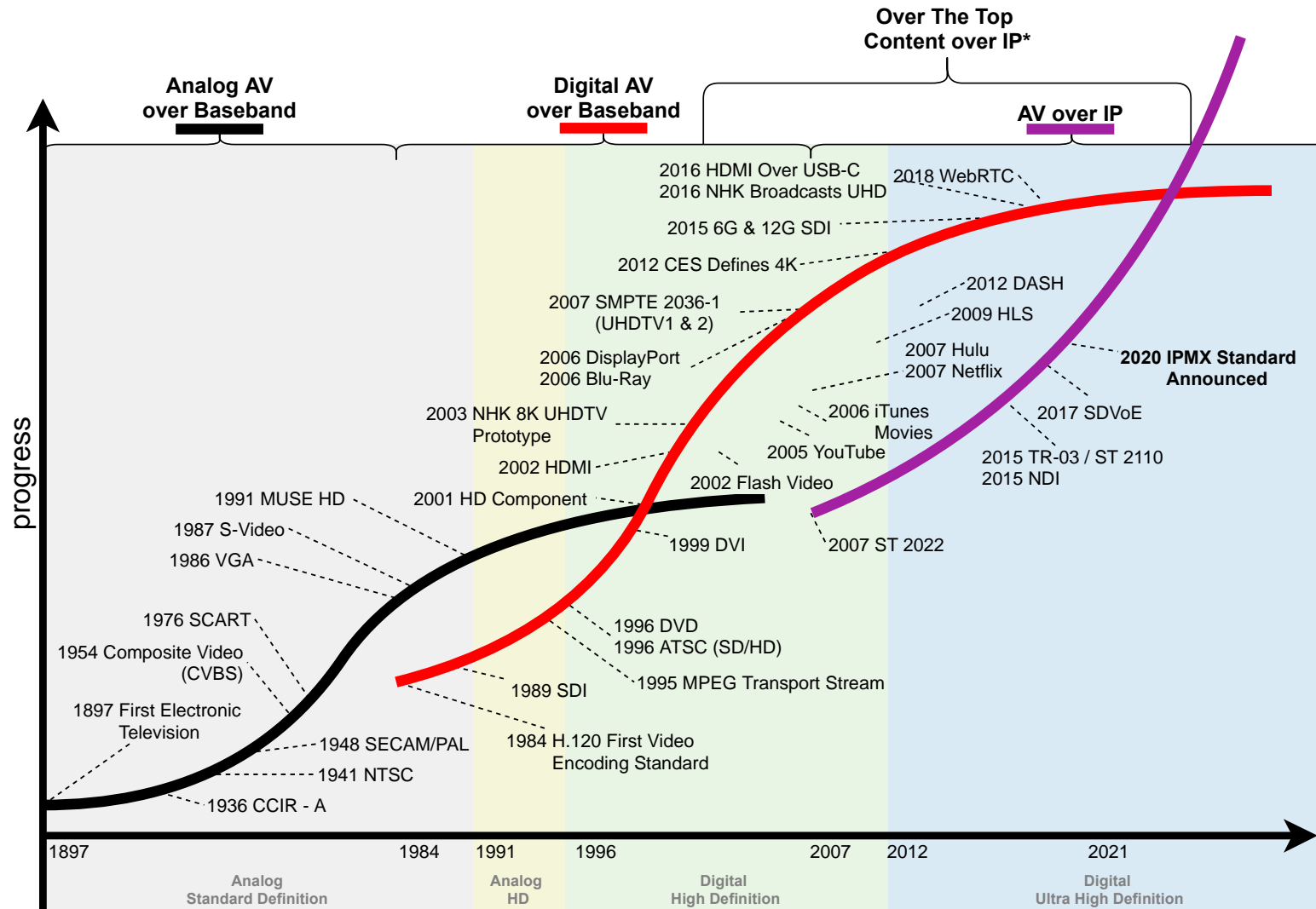


Based on
Hilbert (2020). Digital technology and social
change: The digital transformation of
society from a historical perspective.
Dialogues in Clinical Neuroscience, 22(2),
189–194.
<https://doi.org/10.31887/DCNS.2020.22.2/mhilbert>

Competing with Open Standards



Competing with Open Standards



* Over The Top (OTT) content over IP is not a direct replacement for baseband technology, but it is important for understanding the video landscape. Therefore, it is included in this graphic, but will be replaced by AV over IP for production and ultra low latency transport applications.

Need #1: Great Standards



Need #2: Early Implementations



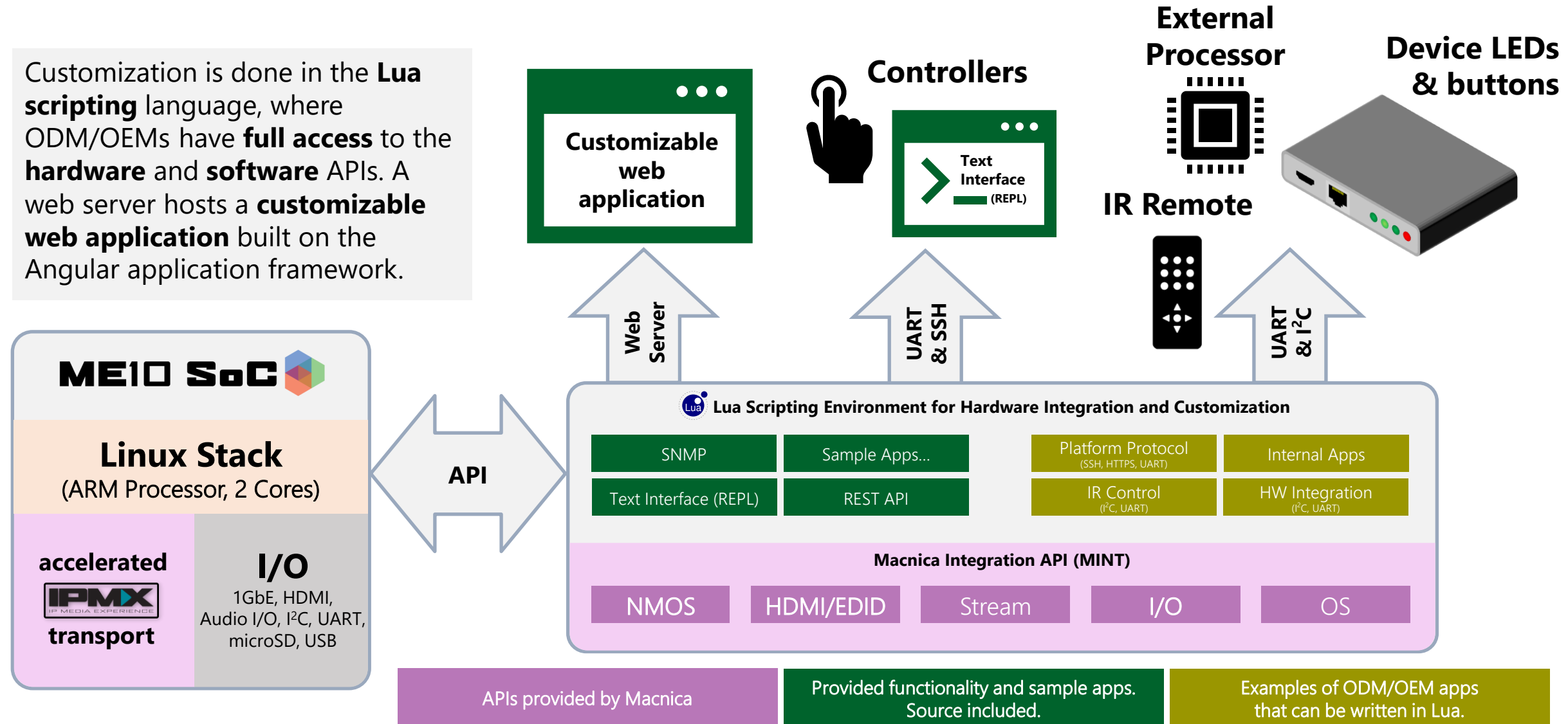
- Launch Kit for IPMX
- Includes pretty much everything for development and testing.
- Continually updated with newest standards & features
- Designed to build IPMX compliant products, when the standard is ready
- Extensive documentation and examples included
- \$1,950 (USD)



Need #2: Early Implementations



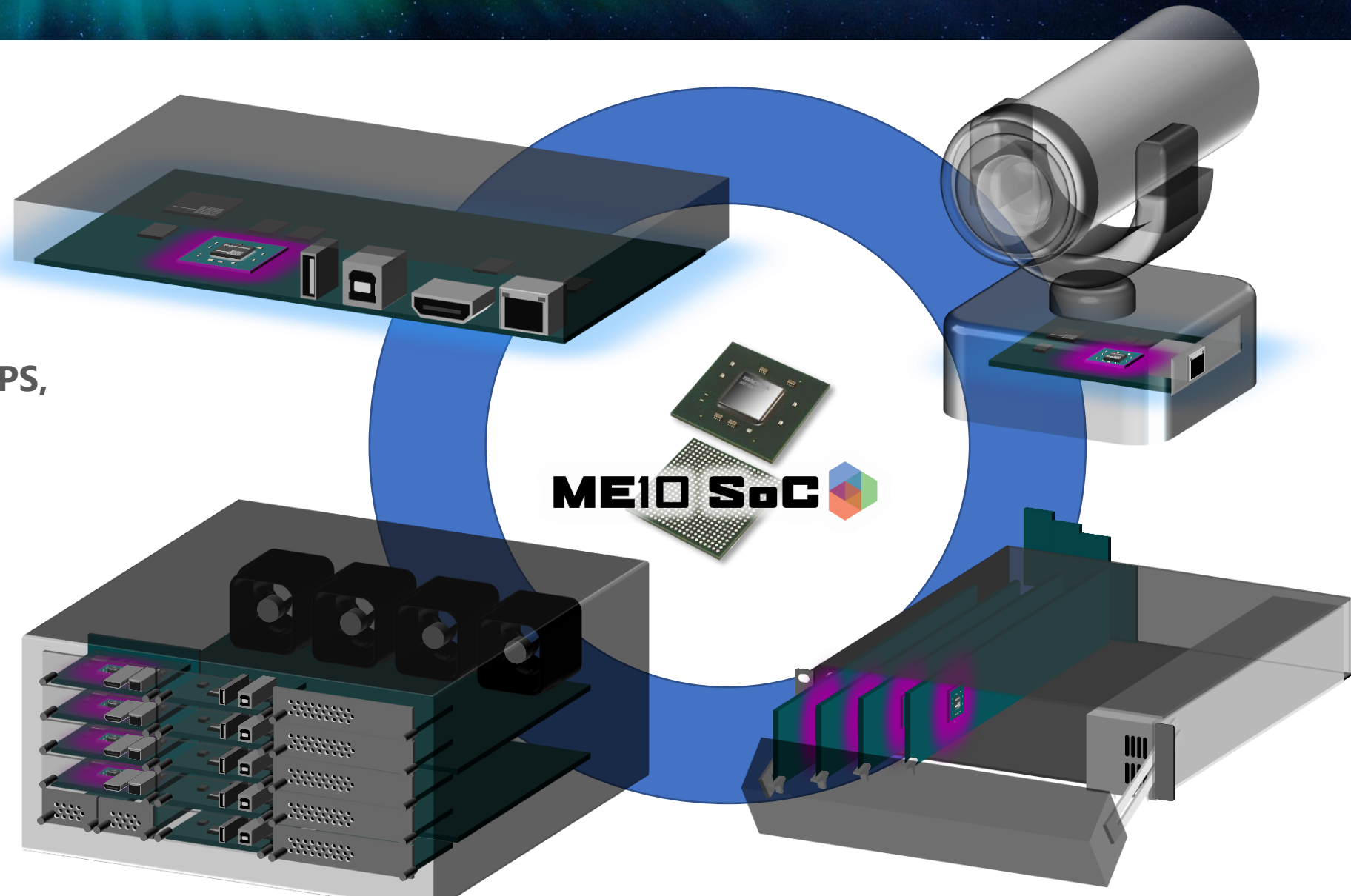
Customization is done in the **Lua scripting** language, where ODM/OEMs have **full access** to the **hardware** and **software APIs**. A web server hosts a **customizable web application** built on the Angular application framework.



Need #2: Early Implementations



- Gateways/extenders
- KVM application
- I/O Cards (Intel® SDM, OPS, OpenGear, ...)
- Cameras
- Multi-channel video wall processors
- Projectors & Televisions
- ...



Need #3: Interoperable Implementations



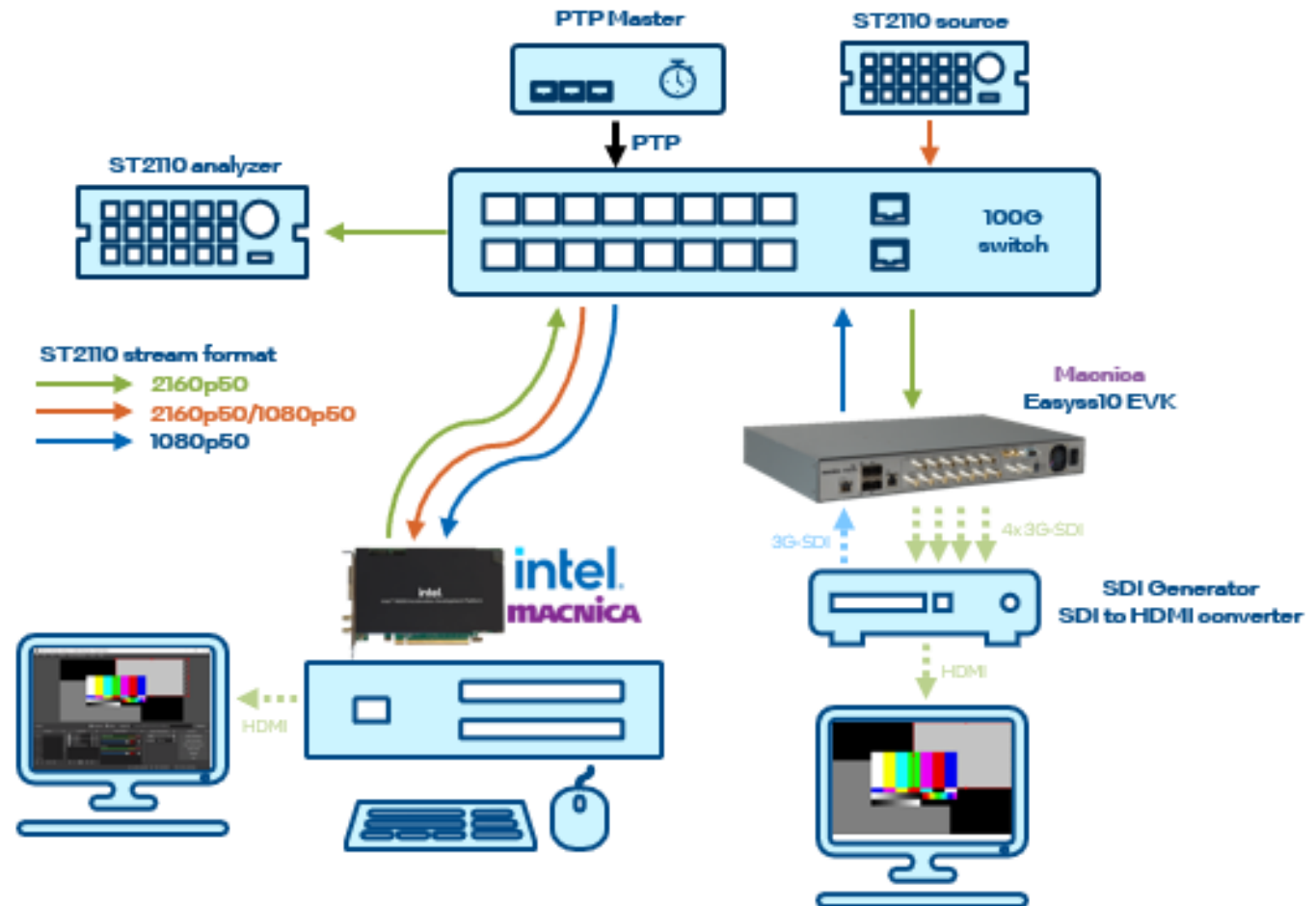
- Currently available: Targets Broadcast
 - Easyss10 Evaluation Kit
 - ST 2110 uncompressed Video and Audio
 - NMOS Available
 - 6 in / 6 Out SDI
- For consideration in future variants:
 - IPMX application
 - Multichannel 4/8K (With JPEG-XS)
 - HDMI and SDI variants
- Technology Preview
 - Intel N6010 with Macnica's ST 2110 Acceleration



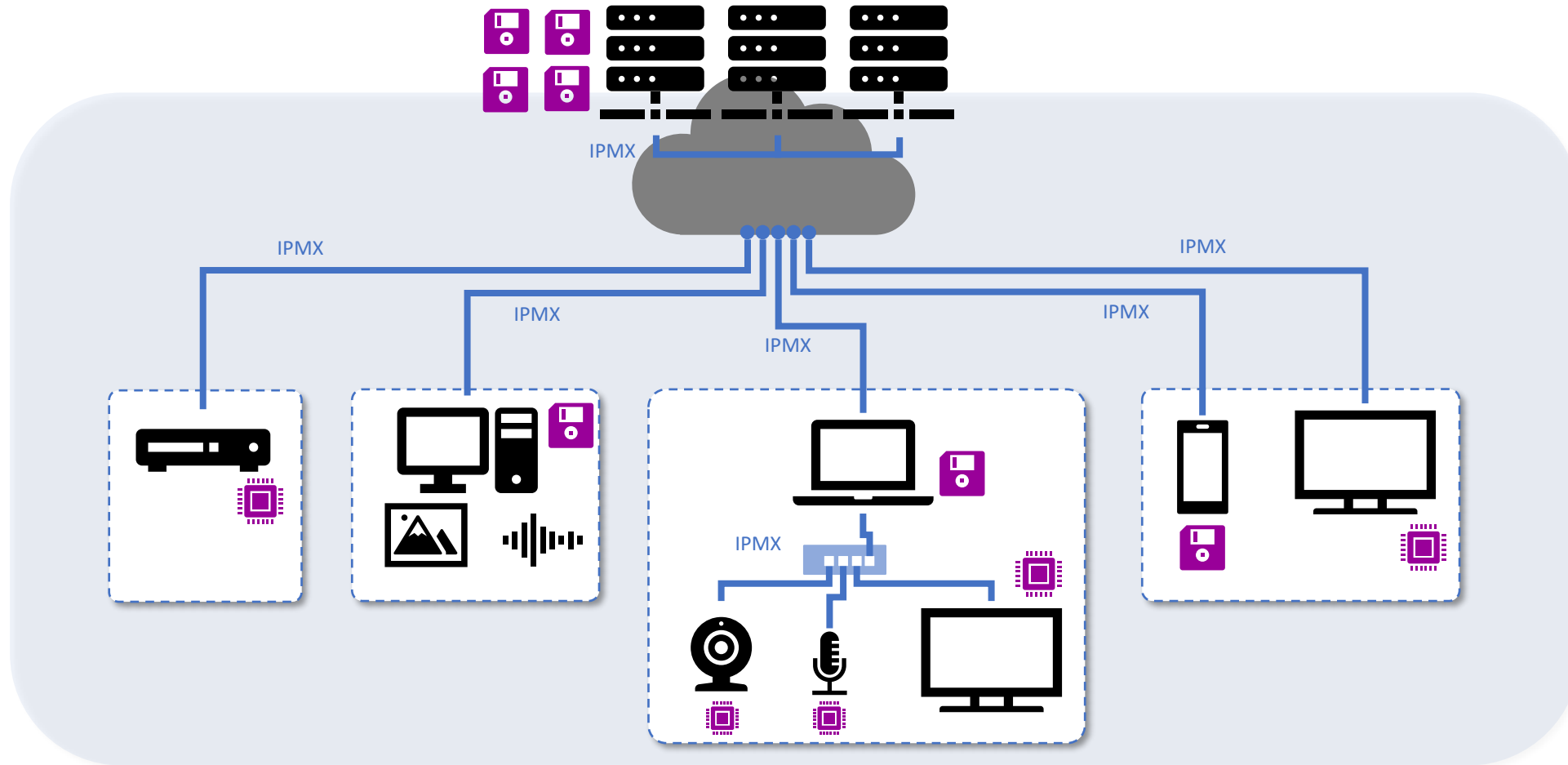
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Need #4: The Post Transition



 Macnica Software Tools (SDKs, Libraries, Services, Applications, ...)

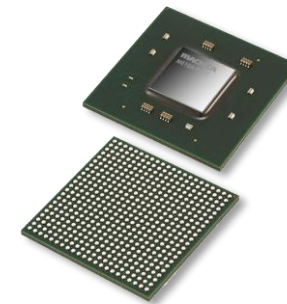
 Macnica Hardware Tools (SoM, SoC, SDM, ...)

Conclusion



macnica

- Support great standards
- Make early implementations
- Make interoperable implementations
- Build products for the new world!



IBC 2022: Hall 2 at Booth 2.A58
Visit us at [macnicatech.com](https://www.macnicatech.com)



Any Questions?

IP SHOWCASE™

