



Wiwynn Experience with ARM CPU

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Consume. Collaborate. Contribute.



AGENDA

- **Wiwynn's Product Portfolio**
- **Wiwynn Experience with ARM**
 - ARM Server Experience in Wiwynn
 - Performance Comparison
 - Challenges



Wiwynn's Product Portfolio

Wiwynn Experience with ARM CPU

EDGE DC Product line

Hyperscale DC Product line



EP100 Series
(3U openEDGE Server)



SV302G3 Series
(1U AI-Inference Server)



SV302G3 Series
(1U High-Computing Server)



SV300G3
(1U Multi-purpose Server)



Olympus
(1U Multi-purpose Server)



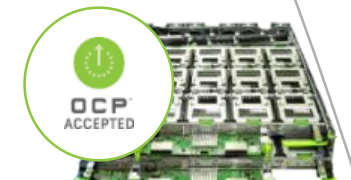
SV5100
(1U EDSFF Storage)



Tioga Pass
(2U3N Computing Server)



Yosemite V2
(4U16N Front-end Server)



Lightning
(2U30Bay All-Flash)



Bryce Canyon
(4U70Bay Storage)

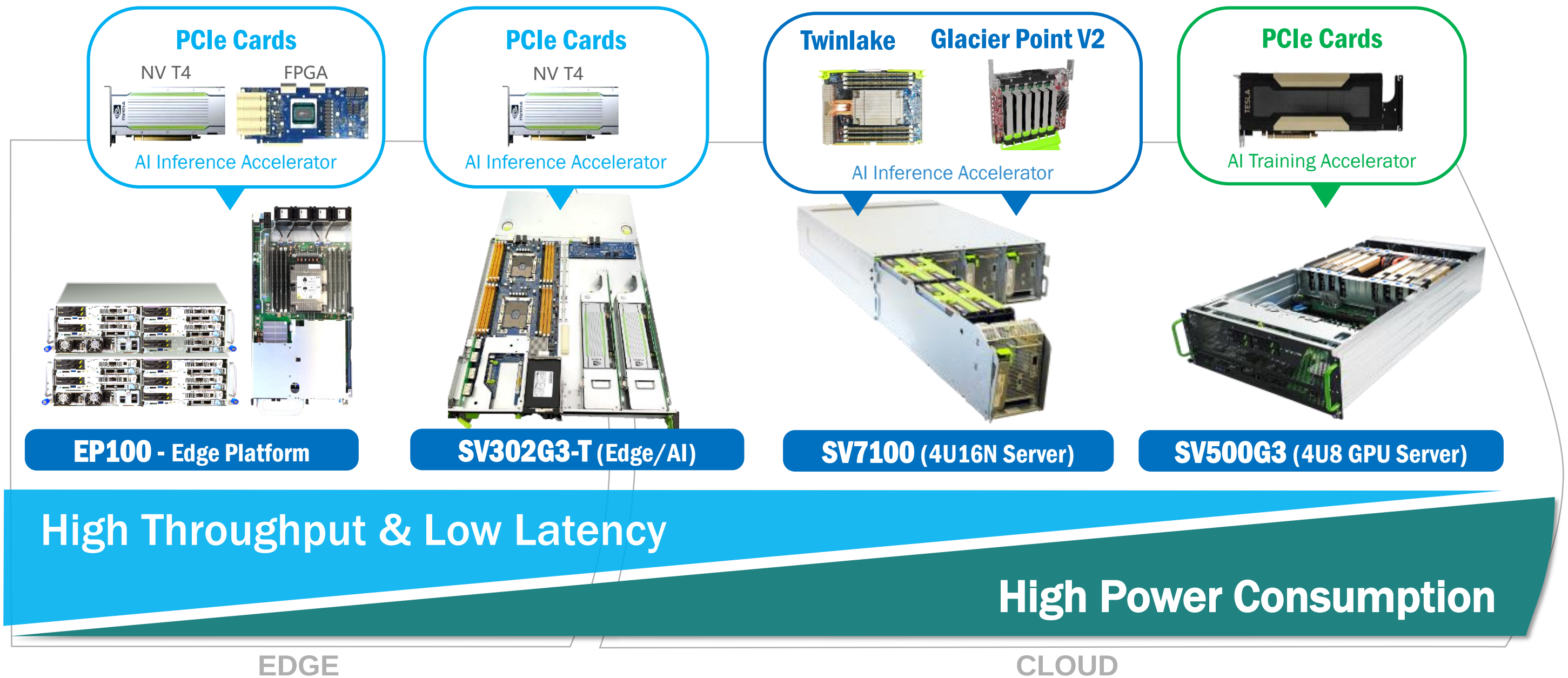
High Throughput & Low Latency

High Power Consumption

EDGE

CLOUD

Wiwynn Offers Full Range Products



Integrate Accelerators Across all Product Lines to Support AIoT Application



4U72B OCP DENSITY OPTIMIZED STORAGE

ST7000 G2



OCP
ACCEPTED

4U16N Edge and AI Inference Server
SV7100_{G2}



EP 100

3U Flexible Edge Platform for Telco RAN and Edge Computing



Wiwynn Experience with ARM

Wiwynn Experience with ARM CPU

2013

Cortex 32Bit
A9-Based ARMv7

2U6N

ARMADA XP SoC



2015

Cortex A57
64-bit ARMV8-a

OCP Storage Server



2017

ARMv8
64bit 10nm

Compute & Storage Server

- 10nm CPU
- 48 Core / TDP 120W
- PCI-e Gen3 x 32
- DDR4 Memory CH x 6

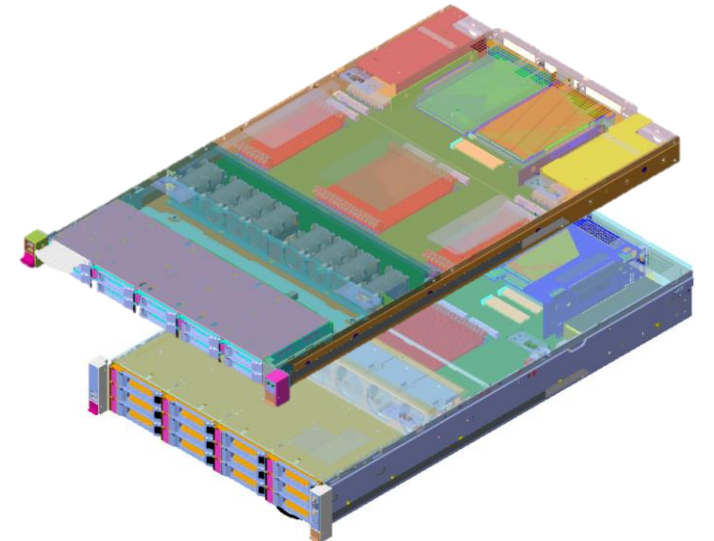


2019

ARMv8.2
64bit 7nm

Compute / Storage

- 7nm CPU
- 80 Core / 180W TDP
- PCI-e Gen4 x 128
- DDR4 Memory CH x8

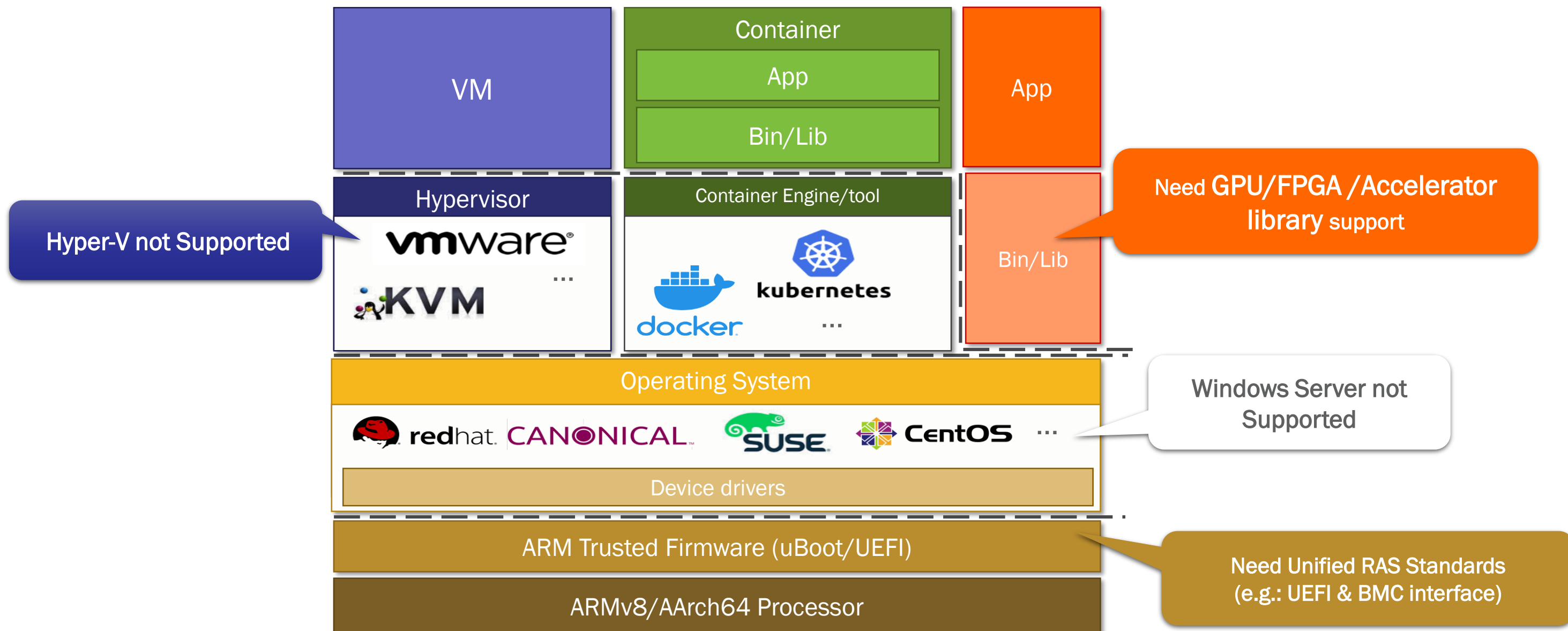


ARM Server Experience in Wiwynn

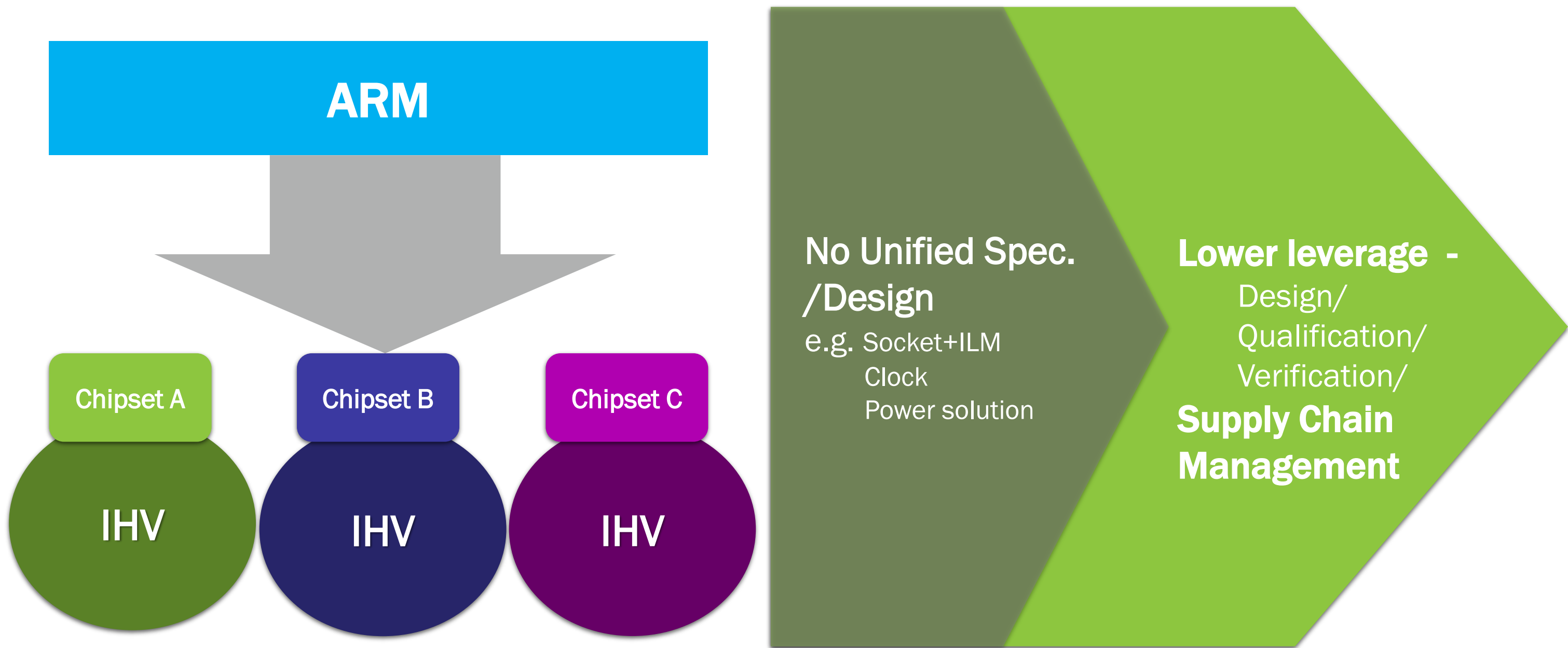


	Wiwynn Server - 1	Wiwynn Server - 2
Processor	ARM x 1 (40C/40T, 2.6Ghz)	Intel Xeon x 1 (18C/36T, 1.6Ghz)
Memory	128GB (32GB x 4)	128GB (32GB x 4)
Storage	500GB SSD x 1	500GB SSD x 1
SPEC CPU2017		
Power Consumption (W)	75	149 
IntRate_base	63.8 	82.6 
IntRate_base per Watt	0.85 	0.55
IntRate_peak	63.8	86.1

Apple to Apple: Performance Comparison



Challenges in Ecosystem: SW & Tools



Challenges in HW Design

THANK YOU