ANALYST DAY
2024

JUNE 13, 2024

harmonic

TODAY'S SPEAKERS

Nimrod Ben-Natan
President &
Chief Executive Officer

Walter Jankovic
Chief Financial Officer

Asaf Matatyaou
SVP, Broadband
Products

Dan Gledhill
SVP, Broadband Fiber

Gil Rudge
SVP, Video Products
& Solutions

AGENDA

Topic	Presenter
Welcome, Introduction and Logistics	Walter Jankovic
Harmonic Vision for the Future	Nimrod Ben-Natan
Broadband Business	Asaf Matatyaou
Broadband Fiber Business	Dan Gledhill
Broadband Financial Overview	Walter Jankovic
Video Business	Gil Rudge
Video Financial Overview	Walter Jankovic
Q&A	All

FORWARD-LOOKING STATEMENTS

During the course of this presentation, we will provide projections and other forward-looking statements regarding future events and our financial performance, including expectations concerning our markets and industry trends, and our business strategy for 2024 and beyond. Such statements are only current expectations and actual events or results may differ materially. We refer you to Harmonic's filings with the SEC, particularly our most recent Reports on Form 10-K, Form 10-Q and Form 8-K. These documents identify important risk factors that could cause actual results to differ materially from our projections or other forward-looking statements.

AT-A-GLANCE

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BROADBAND & VIDEO
Two market-leading business units

2024 REVENUE[1]
$670M
Broadband: $480M
Video: $190M

MARKET CAPITALIZATION[2]
$1.37B

SILICON VALLEY
Headquarters

CLOUD NATIVE INNOVATION LEADER

MARKET-LEADING CUSTOMERS
Worldwide

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Revolutionizing Broadband Networks and Cloud Streaming

[1] Midpoint of FY2024 guidance (April 29, 2024)
[2] Market Capitalization as of June 6, 2024

ANALYST DAY 2024
OPENING REMARKS

Nimrod Ben-Natan
President & Chief Executive Officer

June 13, 2024

EXCITED FOR
THE FUTURE
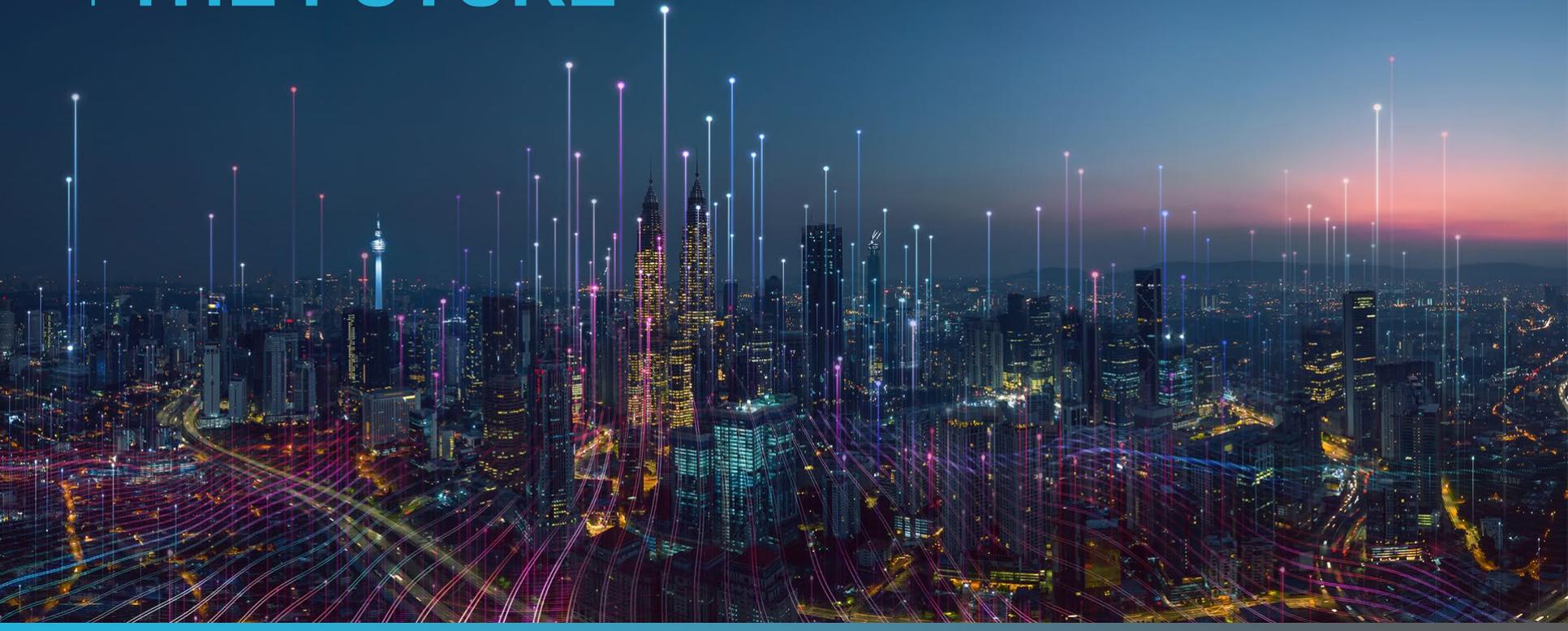
BROADBAND STATE OF PLAY
GROWING INVESTMENT

1 Traffic Trends

2 Service Provider Competition

3 Network Evolution
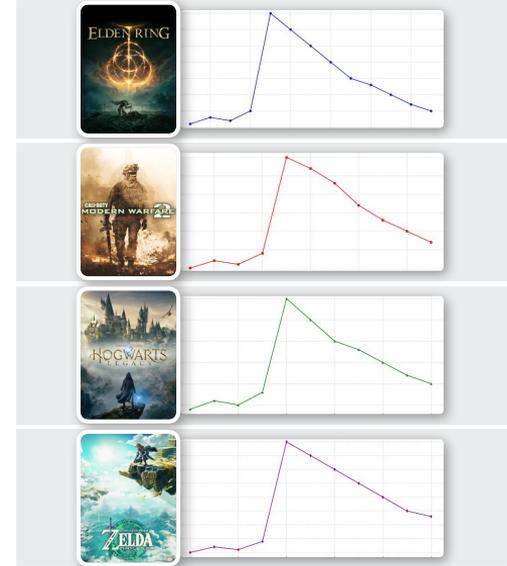
4 Growing TAM

TRAFFIC TRENDS
EVER-GROWING DEMAND FOR BANDWIDTH

Live sports
will drive network upgrades

New game releases
causing traffic surge

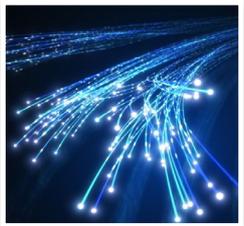# SERVICE PROVIDER COMPETITION
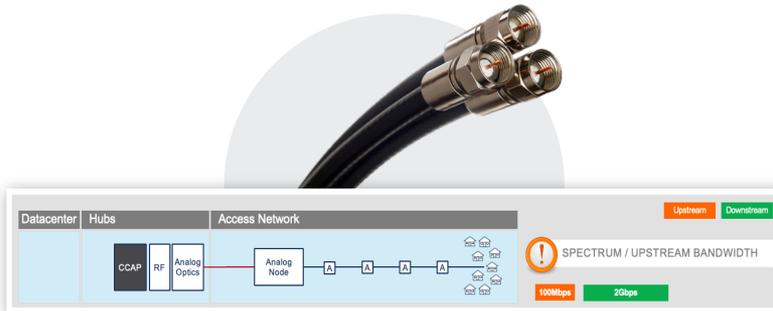## CABLE MUST EVOLVE THE NETWORK
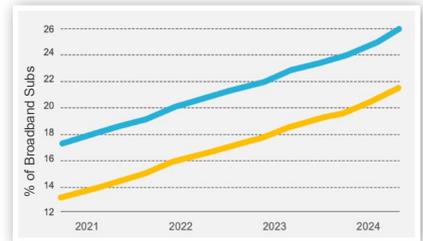

Competitive pressure

FWA

Fiber

Broadband cable under competitive pressure

Datacenter | Hubs | Access Network

CCAP | RF | Analog Optics | Analog Node | A A A A

Upstream | Downstream

⚠ SPECTRUM / UPSTREAM BANDWIDTH

100Mbps | 2Gbps

Majority of cable networks are still based on aging CMTS chassis, lower splits and analog optics transport

Fighting with mobile, streaming bundles
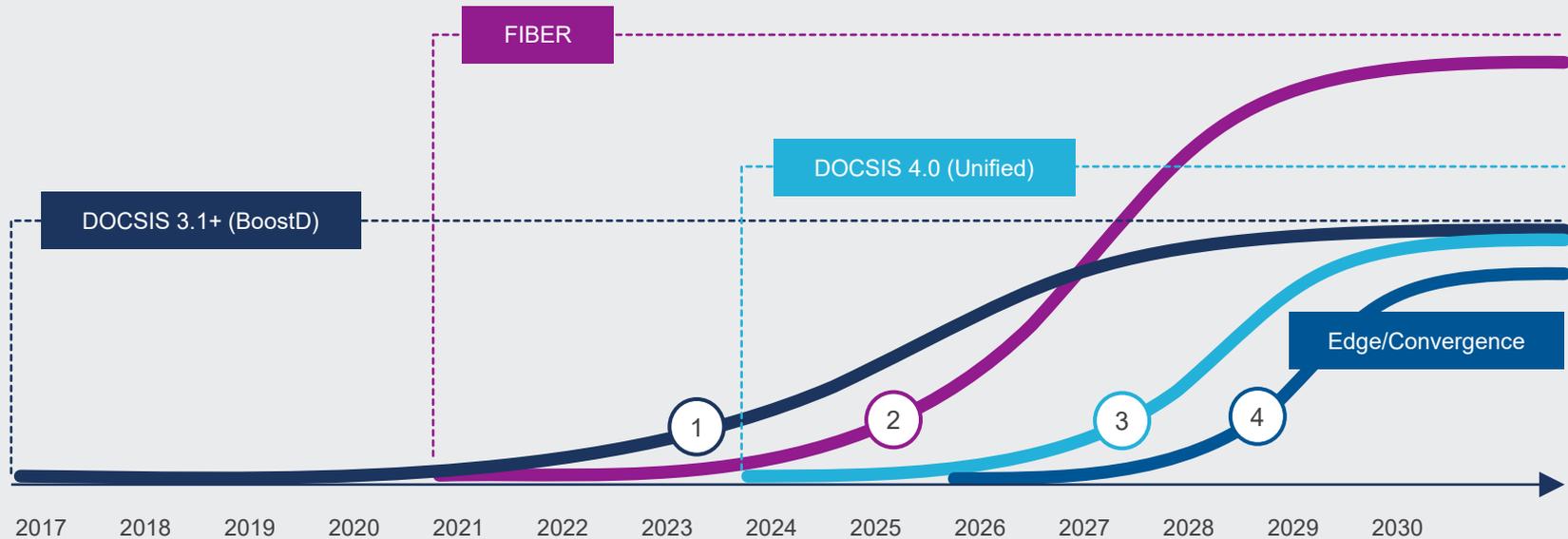
Mobile penetration growth

Streaming video re-bundles

peacock | ⚫tv | NETFLIX

NETWORK EVOLUTION
MULTI-WAVE OF INVESTMENT OVER THE LONG-TERM

FIBER

DOCSIS 4.0 (Unified)

DOCSIS 3.1+ (BoostD)

Edge/Convergence

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

1. Boost upstream and downstream, modernize the network, future ready

2. Fiber islands, greenfield, MDU, rural, edge-out

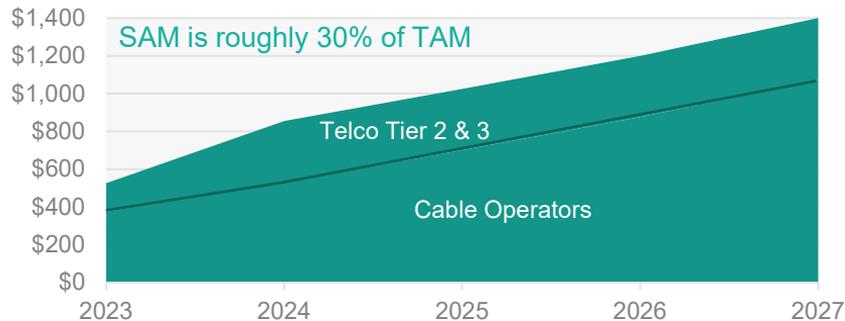3. Symmetric multi-gigabit deployments started in late 2023

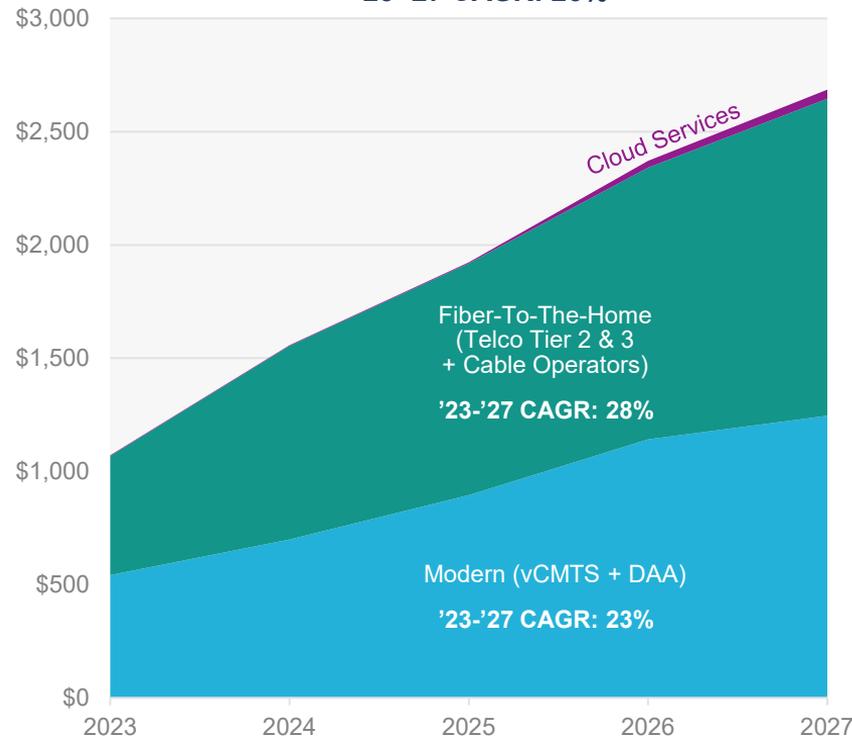4. Edge compute and convergence applications

DOCSIS, FIBER & CLOUD SERVICES
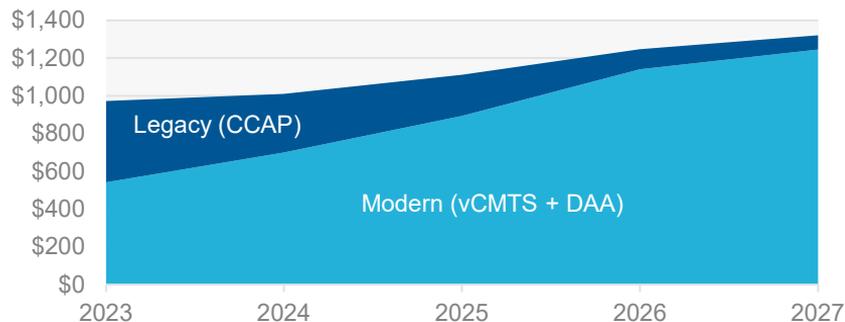## GROWING ADDRESSABLE MARKET

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Fiber-To-The-Home SAM ($M)

SAM is roughly 30% of TAM

Telco Tier 2 & 3

Cable Operators

DOCSIS TAM ($M)

Legacy (CCAP)

Modern (vCMTS + DAA)

Combined SAM ($M)
'23-'27 CAGR: 26%

Cloud Services

Fiber-To-The-Home
(Telco Tier 2 & 3
+ Cable Operators)
'23-'27 CAGR: 28%

Modern (vCMTS + DAA)
'23-'27 CAGR: 23%

Source: Dell'Oro Group with modifications from Harmonic

STRENGTH IN NUMBERS
DEPLOYMENT EXPERTISE & CUSTOMER SUCCESS

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13
Major Tier-1

TELE2 · Claro · vodafone · MILLICOM THE DIGITAL LIFESTYLE · COMCAST · ROGERS · Telefónica · Charter COMMUNICATIONS

>28M
Cable Modems

>113
Commercial Deployments

>185K
Managed Remote Devices

Market Share

62%
DAA

98%
vCMTS

MARKET SHARE LEADER · DELL'ORO GROUP · Harmonic · 2020 · Distributed Access Architecture

MARKET SHARE LEADER · DELL'ORO GROUP · Harmonic · 2021 · Distributed Access Architecture

MARKET SHARE LEADER · DELL'ORO GROUP · Harmonic · 2022 · Distributed Access Architecture

MARKET SHARE LEADER · DELL'ORO GROUP · Harmonic · 2023 · #1 · #1 · CABLE BROADBAND EQUIPMENT

Source: Dell'Oro Group Report, 2023
Dell'Oro Group does not endorse any vendor, product or service depicted in its research publications. The Dell'Oro Group Market Share Leader Badge is used herein with permission. All rights reserved.

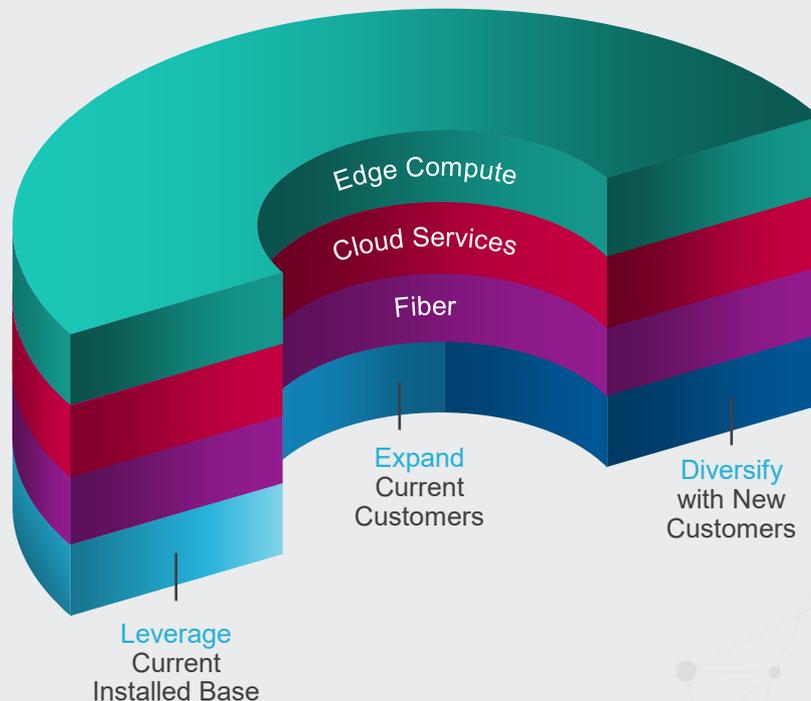# STRATEGY
CASCADING GROWTH OPPORTUNITIES

Leverage our momentum and market position with broadband (cable) operators

Expand
- Grow existing deployments and capture DOCSIS market transition
- Enable commercially effective transition to fiber
- Focus on cloud services to enrich subscribers' quality-of-experience
- Explore edge compute and converged service offering

Diversify to other market segments (telco operators - tier 2 & 3s)
- Utilize relationships with converged operators
- Deliver fiber product differentiation

Edge Compute
Cloud Services
Fiber

Leverage
Current
Installed Base

Expand
Current
Customers

Diversify
with New
Customers

VIDEO
HARMONIC INNOVATION

BROADBAND BUSINESS
PUSHING THE INDUSTRY FORWARD

Asaf Matatyaou
SVP, Broadband Products

June 13, 2024

KEY VALUES TO WIN
BROADBAND IS ESSENTIAL

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High Speed

Reliable

Growth and Expandability

Reputation and Track Record

Reduced Environmental Impact

Future Ready

CLOUD SERVICES
cOS central
Always Connected
Automation
Network & Service Insights
Machine Learning/AI

APPLICATIONS
cOS apps
vBNG
vOLT
vCMTS
Beacon

PLATFORM
cOS platform
Cloud Native
Resilient
Multi Tenancy
Streaming Telemetry
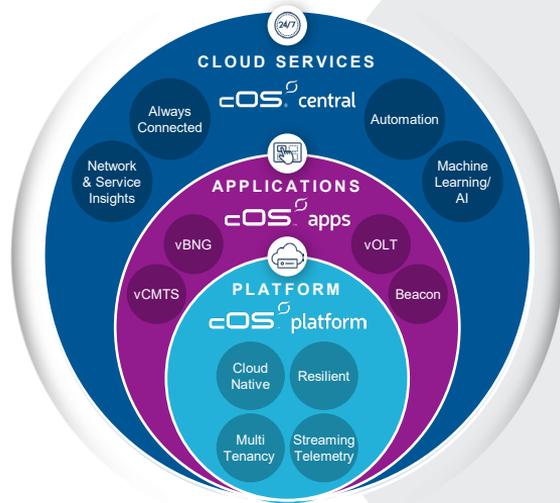
DEVICES

Reef, Wave
RPD SHELVES

Oyster   Ripple
OUTDOOR NODES

Pebble
RPD MODULES

Pier
R-OLT SHELF

Wharf
Jetty
REMOTE SWITCHES

Fin
Pearl
R-OLT

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PLATFORM
EXPANDING TAM VERTICALS

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Optionality
- Deliver DOCSIS + fiber
- Connect to any device in any location
- Adapt to shifts in broadband infrastructure

Compute Real Estate
- Capture valuable real estate nearest to each subscriber
- Feed advanced analytics with real-time and high-volume data

Future Ready
- Provide a foundation for value-added applications
- Complement broadband applications with service chaining networking
- Establish a presence that persists beyond legacy hardware upgrade cycles

CLOUD SERVICES
cOS central
Always Connected
Automation
Network & Service Insights
Machine Learning/AI

APPLICATIONS
cOS apps
vBNG
vOLT
vCMTS
Beacon

PLATFORM
cOS platform
Cloud Native
Resilient
Multi Tenancy
Streaming Telemetry

PLATFORM
EXPANDING TAM VERTICALS

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CLOUD SERVICES
cOS central

APPLICATIONS
cOS apps

PLATFORM
cOS platform

Optionality

Compute Real Estate

Future Ready

Charter
COMMUNICATIONS

Charter Communications will deploy **Harmonic's CableOS Platform in a distributed access architecture** for converged multi-gigabit DOCSIS 3.1 and 4.0, **creating a flexible and sustainable foundation** for market-leading connectivity services.
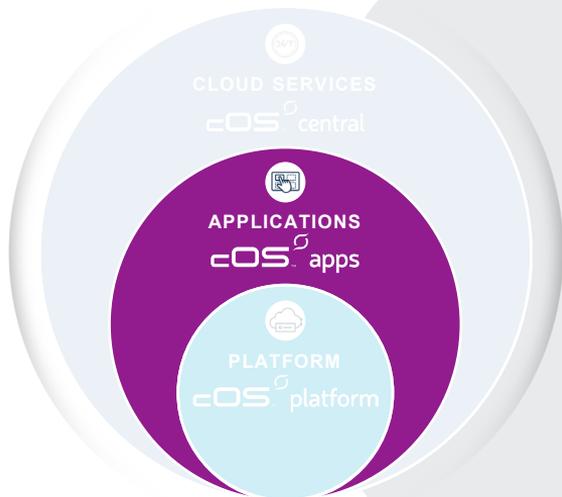
みんなが願っていることを。
OCN
Okinawa Cable Network Inc.
沖縄ケーブルネットワーク(株)

"Harmonic's cOS virtualized core software is well established with a **proven track record** for bringing agility to broadband operators, **enabling more frequent, secure and efficient upgrades.**"

Hiromitsu Awai,
Board Director at Okinawa Cable Network Inc.

APPLICATIONS
SOFTWARE VELOCITY DELIGHTS CUSTOMERS

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CLOUD SERVICES
cOS central

APPLICATIONS
cOS apps

PLATFORM
cOS platform

Broadband Applications
- vCMTS is the first and market-share leading CMTS
- vOLT and vBNG expand broadband reach to fiber services

Subscriber Enrichment
- Speed maximizer reduces truck rolls and improves subscriber NPS
- L4S enhances user experience by reducing lag and packet loss

Reliable Applications
- "Detect and protect" software resiliency increases service uptime
- Subscriber churn is directly correlated with reduced uptime

APPLICATIONS
SOFTWARE VELOCITY DELIGHTS CUSTOMERS

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CLOUD SERVICES
cOS central

APPLICATIONS
cOS apps

PLATFORM
cOS platform

Broadband Applications

Subscriber Enrichment

Reliable Applications

COMCAST

> The use of **new vBNG and R-OLT technology connected to its vCMTS** will allow it to consolidate management of its cable and fiber assets to one system."
>
> "That seamless management system enables and empowers us to **deliver multi-gig symmetrical** services across our network **regardless of the type of wire connecting our customers.**

Elad Nafshi*
EVP, Chief Network Officer for Comcast Cable

vodafone Ziggo

> vCCAP using **[Beacon] embedded PMA engine**: telemetry-driven IUC optimization, **a big WOW!**

Frans Biesheuvel
Domain Architect at Vodafone Ziggo

SUBSCRIPTION-BASED CLOUD SERVICES
INCREASE SUBSCRIBER SATISFACTION & REDUCE OPEX

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CLOUD SERVICES
cOS central

APPLICATIONS
cOS apps

PLATFORM
cOS platform

Network and Service Insights
- Drive proactive resolution with AI-based recommendations
- Increase subscriber satisfaction and reduce churn

Deployment and Operation Automation
- Deploy rapidly and simplify maintenance
- Reduce manual intervention and increase cost savings

Central Broadband Monitoring Service
- See the invisible and visualize network health
- Reduce operator OPEX with a single pane of glass

SUBSCRIPTION-BASED CLOUD SERVICES
INCREASE SUBSCRIBER SATISFACTION & REDUCE OPEX

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CLOUD SERVICES
cOS central

APPLICATIONS
cOS apps

PLATFORM
cOS platform

Network and Service Insights

Deployment and Operation Automation

Central Broadband Monitoring Service

kbro

" The platform also provides real-time analytics and **insights for proactive network intelligence** to ensure an **outstanding broadband experience for our subscribers.** "

Alex Hsieh
Chief Technology Officer at KBRO

Ritter COMMUNICATIONS

" cOS Central gives us an **insight into potential capacity issues and network anomalies** before they happen, to **ensure the best possible service** for our customers. "

Greg Sunderwood
SVP of Technology at Ritter Communications

DEVICES
EXPANSIVE BROADBAND CONNECTIVITY

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Optionality, Any Device in Any Location
- Indoor and outdoor
- DOCSIS and fiber devices

Lowest Power Consumption with Best Performance
- Unified 4.0 Remote PHY Devices (RPDs) and nodes
- Dense GPON/XGS/ComboPON shelves and modules

Patented Technology
- Over 40 device patents
- vBias, Buoy, Last Gasp

DEVICES

Reef, Wave	Oyster Ripple	Pebble	Pier	Wharf Jetty	Fin Pearl
RPD SHELVES	OUTDOOR NODES	RPD MODULES	R-OLT SHELF	REMOTE SWITCHES	R-OLT

DEVICES
EXPANSIVE BROADBAND CONNECTIVITY

NTT DOCOMO PACIFIC Deploys New 10G FTTP Service with Harmonic

Coupling cOS™ **virtualized broadband core** with **Wharf** switch and **Fin** optical line terminals (OLTs)

Claro Perú to Bring 10G FTTH Offering to Market with Harmonic

Deployed cOS Platform with **virtualized CMTS software**, **Reef** Remote PHY (R-PHY) shelves and **Ripple** R-PHY nodes, adding the **Fin** 10G SFP+ OLT to Ripple.

Optionality, Any Device, Any Location

Lowest Power Consumption With Best Performance

Patented Technology

DEVICES

Reef, Wave	Oyster Ripple	Pebble	Pier	Wharf Jetty	Fin Pearl
RPD SHELVES	**OUTDOOR NODES**	**RPD MODULES**	**R-OLT SHELF**	**REMOTE SWITCHES**	**R-OLT**

WHY WE WIN:
SOFTWARE TRANSFORMS THE FUTURE TODAY

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Speed
Symmetric multi-gigabit broadband

Mature and Field Proven
Market-share leader in cable broadband, vCMTS and DAA

Mission Critical Reliability
Software detects and protects with > 99.999% uptime

Green
Continuously reduces significant carbon footprint

Future Ready
Peace of mind with software expandability and upgradeability
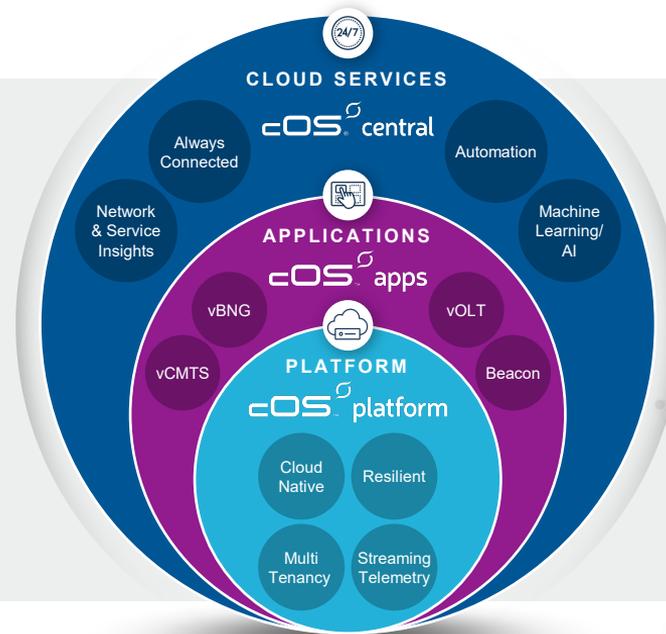
CLOUD SERVICES
cOS central
Always Connected
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APPLICATIONS
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PLATFORM
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Cloud Native
Resilient
Multi Tenancy
Streaming Telemetry

DEVICES

Reef, Wave
RPD SHELVES

Oyster   Ripple
OUTDOOR NODES

Pebble
RPD MODULES

Pier
R-OLT SHELF

Wharf
Jetty
REMOTE SWITCHES

Fin
Pearl
R-OLT

ENERGY EFFICIENCY IS CRITICAL TO OPERATORS
REDUCE OPEX AND MEET CARBON NEUTRALITY
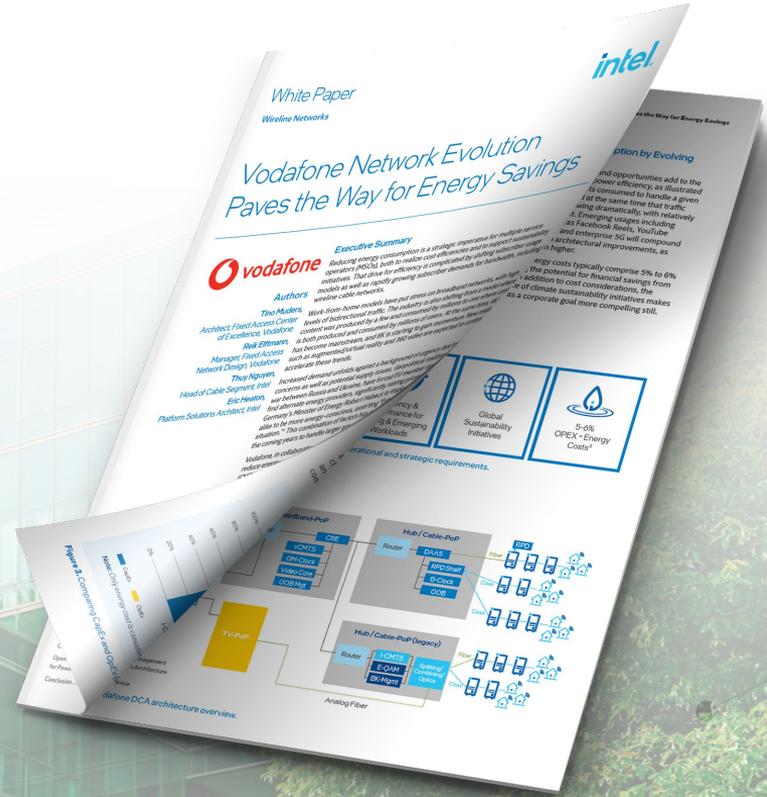
GREEN BROADBAND
REDUCE SPACE, POWER AND OPEX

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Legacy
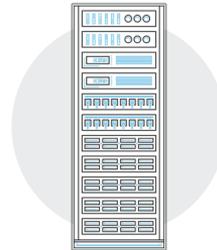
Analog node

Harmonic Platform

DAA node
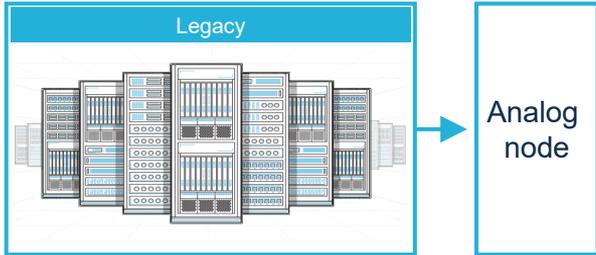
Up to 70% Power Savings

vCMTS

Low power devices

Up to 95% Space Savings

Up to **28 to 1** rack reduction

Savings with vCMTS & 250K Nodes*

25K Racks

50MW / year

$110M / year

MODERN BROADBAND INFRASTRUCTURE
PUSHING THE INDUSTRY FORWARD

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Legacy

Harmonic Platform

Legacy	Category	Harmonic Platform
• Very limited on Gen-1 cards • Partially limited on Gen-2 cards	DOCSIS 3.1+/BoostD	• Full spectrum downstream and upstream • Maximum OFDM(A), SC-QAM or Video QAM • Beacon ISM maximizes speed to each subscriber
• No support or in the future	DOCSIS 4.0	• Full support • Including Unified 4.0
• Monolithic • Singular	Software Architecture	• Microservices-based cloud-native architecture • Horizontally scalable with independent applications
• Legacy CLI and SNMP	Manageability	• Operational familiarly with legacy CLI and SNMP • Enhanced operations with streaming Telemetry and APIs
• High power consumption • Fixed	Energy	• Low power consumption • Dynamic and programmable
• No support	Fiber Optionality	• vOLT and vBNG
• Analog optics • Limited distance and wavelength	Transport	• Digital optics with improved signal fidelity • Longer distance with more wavelengths
• 10-to-20yr old aging platforms and designs • Limited and long lead-time supply chain	Hardware	• Commercial Off-The-Shelf (COTS) leverages economies of scale • Updated annually with Moore's Law advantages
• Limited • Subject to EOL OS	Security	• Continuously up-to-date with modern OS and packages
• Limited and fixed	Throughput/Scalability	• Scale out architecture • Expanding with new CPU/NIC generations and software optimizations
• At its best when released • Never gets better	Overall	• Better than the rest when released • The best is yet to come
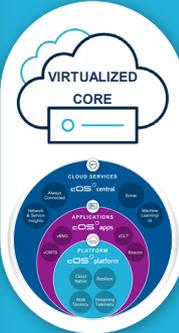
VIRTUALIZED CORE

CLOUD SERVICES

cOS central

APPLICATIONS

cOS apps

vCMTS · vBNG · vOLT · Beacon

PLATFORM

cOS platform

Cloud Native · Resilient · Multi Tenancy · Streaming Telemetry

MODERN BROADBAND INFRASTRUCTURE
PUSHING THE INDUSTRY FORWARD

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	Legacy	Harmonic Platform
High speed	DOCSIS limited, no fiber	✓
Reliable (5x9s uptime)	3x9s or less	✓
Growth and expandability	None	✓
Reputation and track record	No modern software	✓
Environmental impact	Unfriendly	✓
Future ready	No	✓

FIBER
BUSINESS

Dan Gledhill
SVP, Broadband Fiber

June 13, 2024

WINNING IN CABLE
DISRUPTING IN TELCO

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DEPLOYMENT EVOLUTION

Extending Service Area

Adding Capability

Sustain and Enhance

Streamline Operations

POSITIONING

Hybrid Devices

Open ONU

Unified vCore

Reach Further

MARKETS

Cable

Telco

R-OLT

DEVICES

Reef, Wave	Oyster Ripple	Pebble	Pier	Wharf Jetty	Fin Pearl
RPD SHELVES	OUTDOOR NODES	RPD MODULES	R-OLT SHELF	REMOTE SWITCHES	R-OLT

FIBER MARKET DEFINITION
CARVING OUT A NICHE
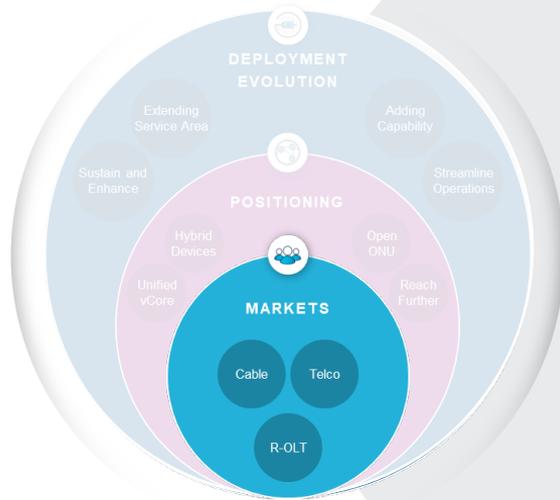
Cable Operators
- 185k+ RPDs deployed today serving 28m+ subscribers
- Each existing RPD reflects potential for several R-OLT

Fiber Forward Providers
- Targeting agile tier 2 & 3s with a natural inflection point for fiber
- Migration to 10G, major footprint growth, hospitality use cases

Sizing the Opportunity
- Fiber revenue will be primarily driven by cable companies near-term
- Telcos will ramp like distributed access did within cable

DEPLOYMENT EVOLUTION

Extending Service Area

Adding Capability

Sustain and Enhance

Streamline Operations

POSITIONING

Hybrid Devices

Open ONU

Unified vCore

Reach Further

MARKETS

Cable

Telco

R-OLT

HOW HARMONIC WINS AND RETAINS ACCOUNTS
SIMPLIFY & SAVE WITH A LIFETIME PLATFORM

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Any Device in the Home with Open ONU
- Empower operators to select best-in-class ONU/ONT

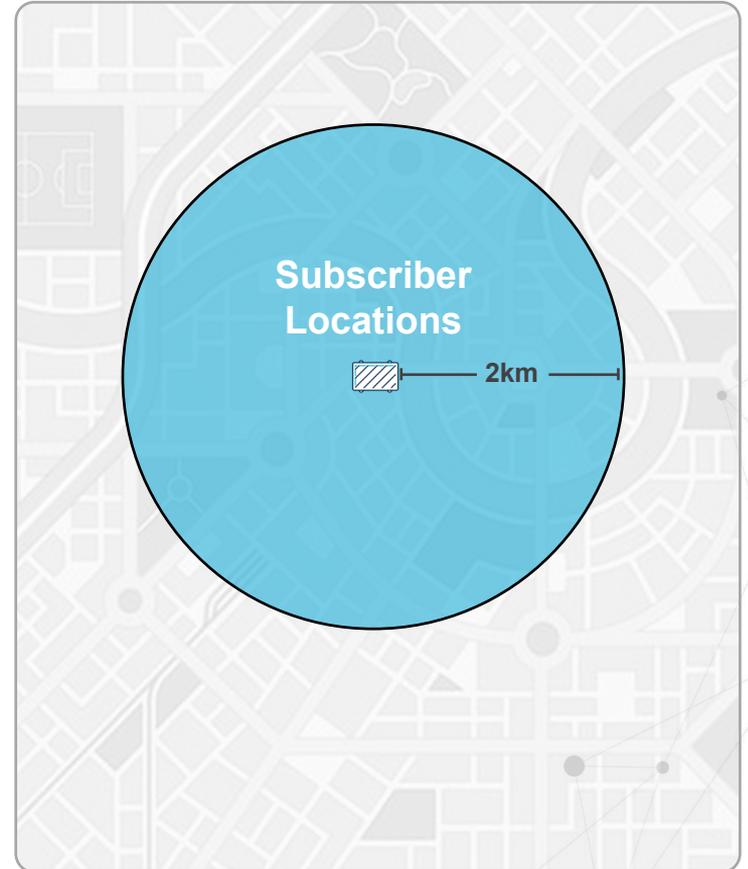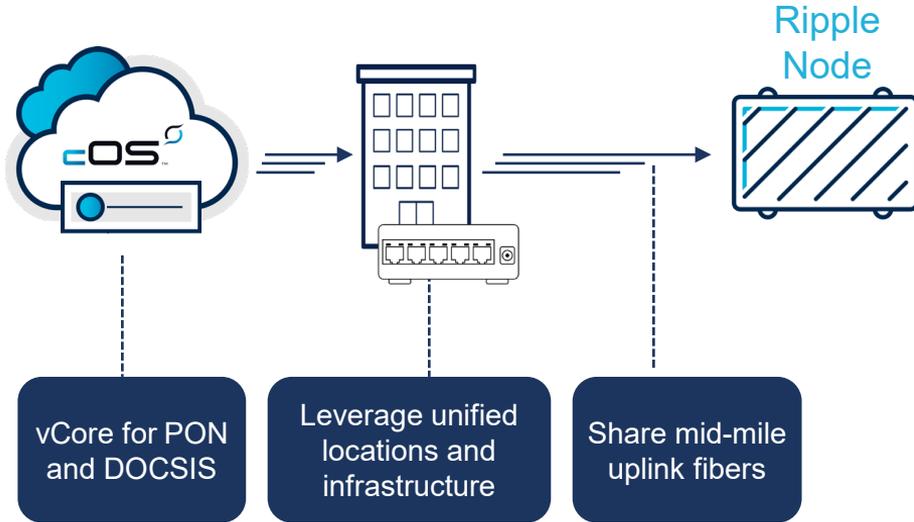### Any Fiber Standard with Streamlined Operations
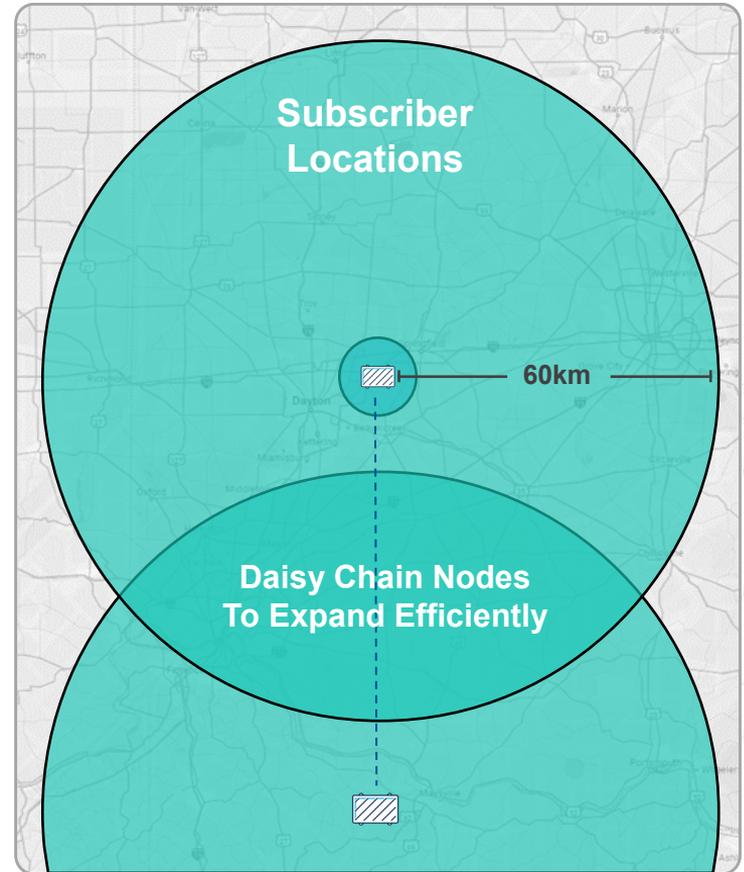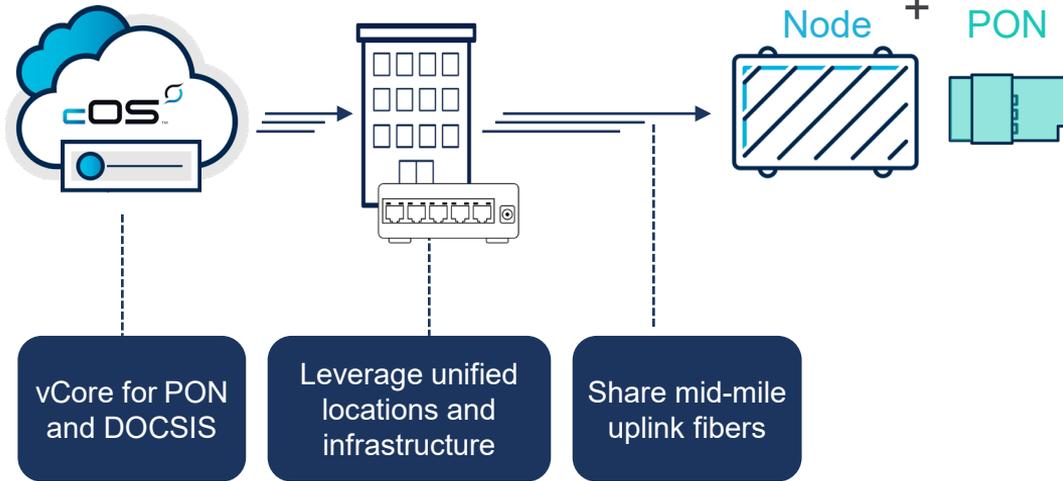- Utilize EPON, GPON, XGS, 25GS and beyond from a unified core

Any Network Topology with Central Administration
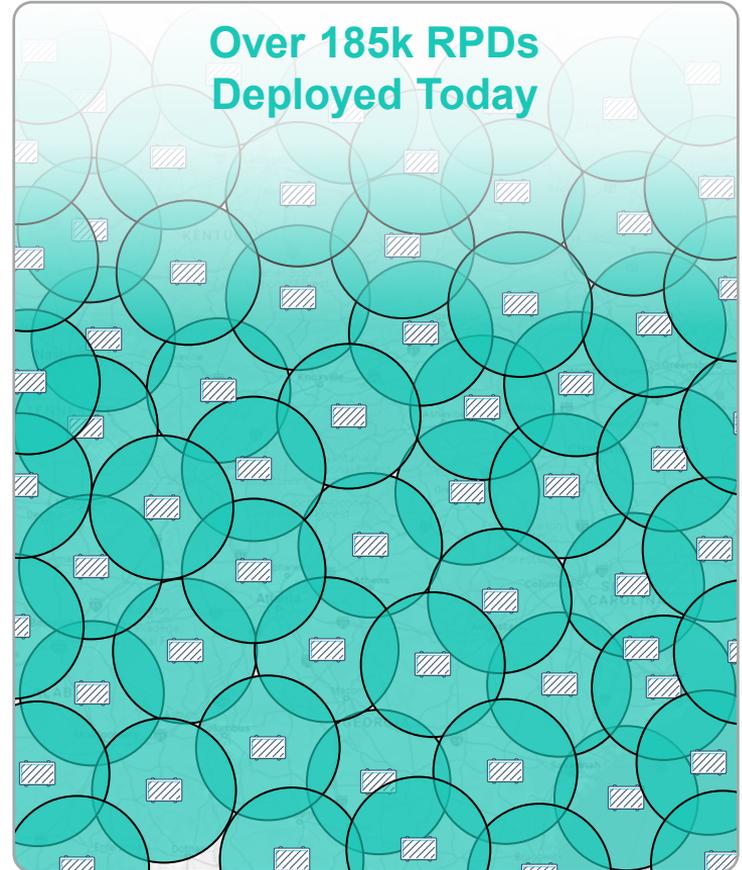- Deploy shelves, nodes, and OLT pluggables from a single vCore

Ripple Node

vCore for PON and DOCSIS
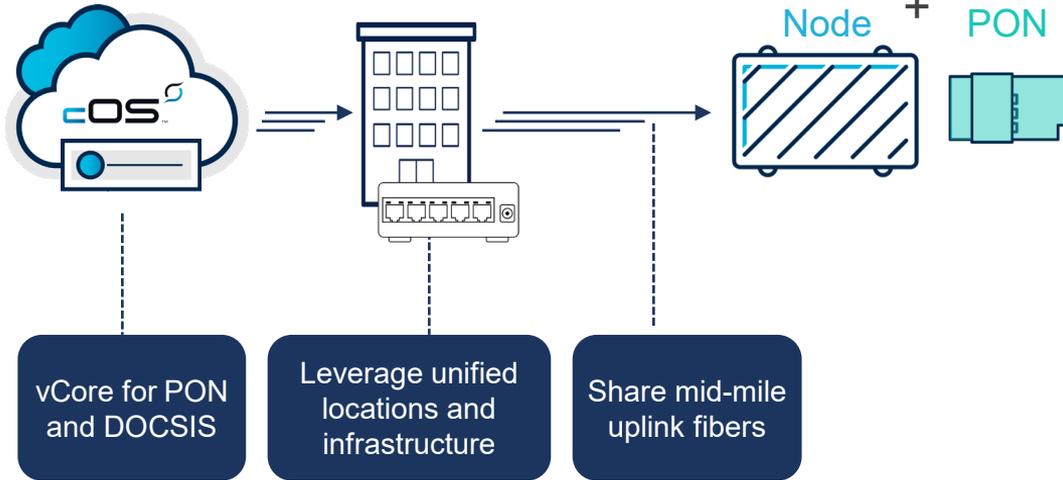
Leverage unified locations and infrastructure

Share mid-mile uplink fibers

Subscriber Locations

2km

RESHAPING THE NETWORK WITH HYBRID DEVICES
EDGE OUT FASTER – WITH LESS OVERHEAD

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Ripple Node **+** 10G PON

vCore for PON and DOCSIS

Leverage unified locations and infrastructure

Share mid-mile uplink fibers

Subscriber Locations

60km

Daisy Chain Nodes To Expand Efficiently

RESHAPING THE NETWORK WITH HYBRID DEVICES
EDGE OUT FASTER – WITH LESS OVERHEAD

Ripple Node + 10G PON

Over 185k RPDs Deployed Today

vCore for PON and DOCSIS

Leverage unified locations and infrastructure

Share mid-mile uplink fibers

ANNOUNCED DEALS WITH TIER 1 CUSTOMERS
WINNING IN CHALLENGING MARKETS
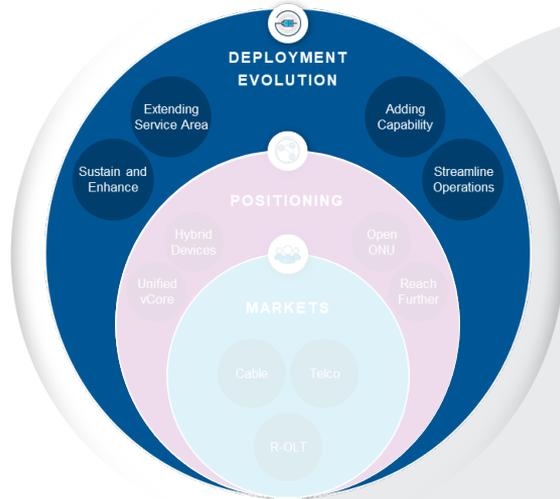
Edge Out Faster with Hybrid RPD-OLT Devices

Leverage a Unified cOS vCore for Simplified Operations

Offer Fast, Affordable Fiber Broadband

> "We're excited to introduce a new FTTH offering that fuels faster, more reliable broadband experiences for customers while significantly **reducing** our **space**, **power** and cooling **costs** as we **expand** our service areas."

Nelson Moscoso
Deputy Director of Fixed Services Network at Claro Perú

> "Adding fiber services with the Harmonic fiber solution enables us to ensure **faster**, **reliable broadband** experiences that **delight** our residential **subscribers** while simultaneously giving us the flexibility to offer ultra high-speed fiber broadband for enterprise accounts."

Fabio Mando
Chief Technology Officer at Millicom

ANALYST DAY 2024

BROADBAND
FINANCIAL OVERVIEW

BROADBAND TARGET MODEL 2026 ($M)[1]

Financial Metric	2023	2024[2]	2026 Model	3-year CAGR
Revenue	$388	$480	$800	27%
Gross Margin[1]	46.8%	47.5%	49.0%	-
Adj. EBITDA[1]	$71	$107	$224	47%
Adj. EBITDA Margins[1]	18.3%	22.3%	28.0%	-

Key Highlights

REVENUE
Growth driven by DOCSIS network migrations and fiber expansion with both Cable Operators and Telcos

GROSS MARGIN
Continued expansion due to broader customer base and cOS mix

EBITDA
Increasing with revenue growth and operating leverage on OPEX

[1] Non-GAAP

[2] Midpoint of FY2024 guidance (April 29, 2024)

VIDEO BUSINESS PROFITABILITY AND GROWTH

Gil Rudge
Senior Vice President,
Video Products & Solutions

June 13, 2024

Harmonic's strategy to **elevate** the Video business
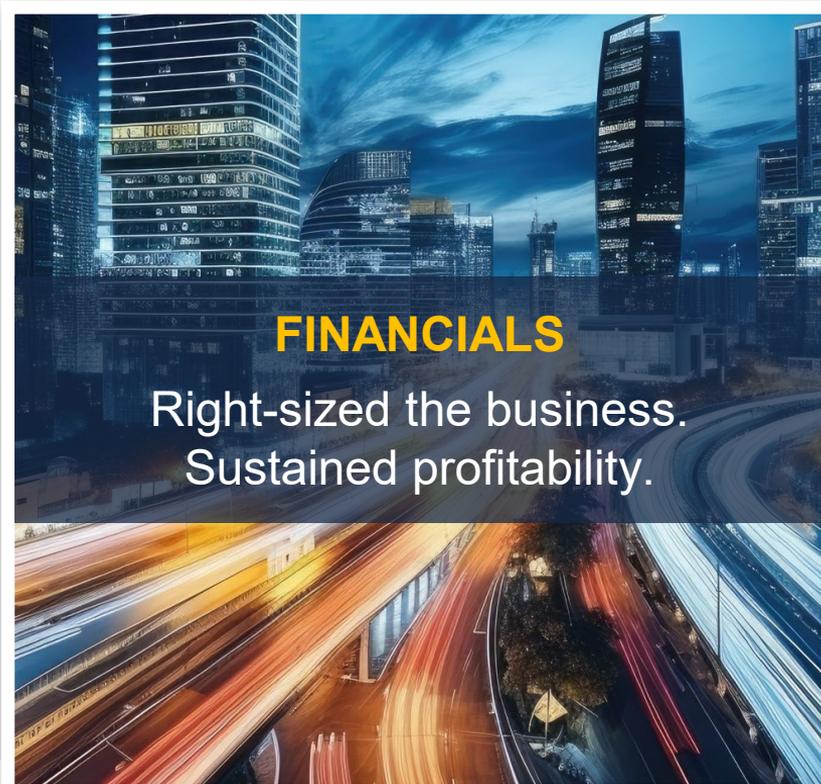
ANALYST DAY 2024

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MARKET DYNAMICS
THE RIGHT
POSITIONING

MARKET DYNAMICS
HARMONIC IS WELL POSITIONED

BROADCAST

BROADCAST

PAY TV

- Unified signal for all viewers
- 24/7 linear channels
- Mature segment with "Broadcast" standards

BROADCAST INFRASTRUCTURE

HW/SW appliances in private facilities

Migration starting to the cloud & hybrid
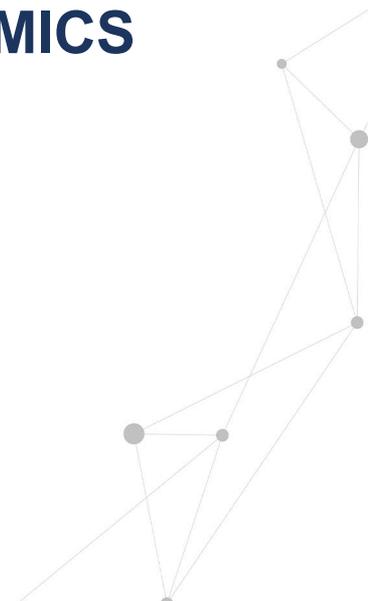
STREAMING

SVOD

TV EVERYWHERE

SPORTS STREAMING

- Dedicated stream per viewer including targeted ads
- On-demand viewing
- Growing and evolving

STREAMING INFRASTRUCTURE

Public/Private cloud for scalability and elasticity

Adopting "Broadcast" standards

TODAY: $2 BILLION TAM IN 2023
EQUALLY SPLIT BETWEEN CLOUD & APPLIANCE

Appliance

Cloud

2023
$2B TAM

BUSINESS MODEL
- CAPEX | Per channel with recurring SLA

TRENDS
- Highly mature market
- Multi-billion $ install base
- Focus on efficiency and cost reduction

BUSINESS MODEL
- OPEX | Usage based (variable)

TRENDS
- Growing # of platforms and content
  - Expanding with premium sports
- Growing viewer engagement leads to higher traffic and targeted ads

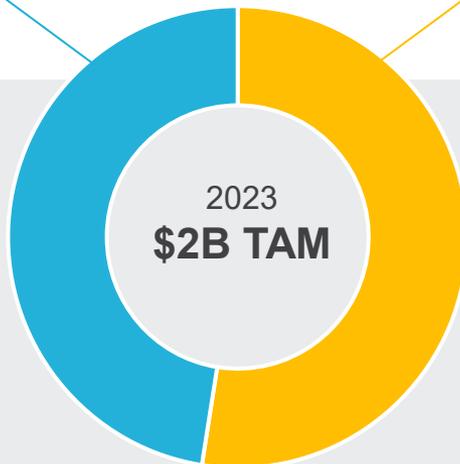# TOMORROW: MAINTAIN $2 BILLION TAM IN 2026 WITH SHIFT TO CLOUD

Appliance

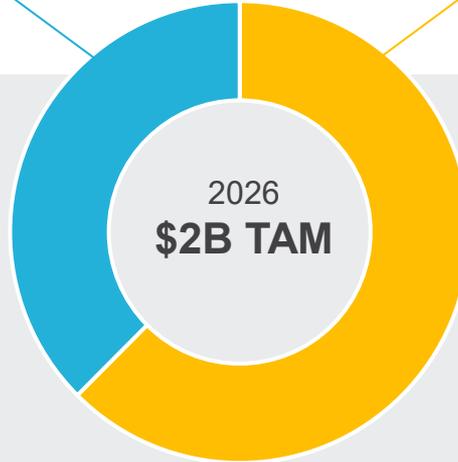### BUSINESS MODEL
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Cloud

BUSINESS MODEL
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APPLIANCE BUSINESS
PROFITABLE BUSINESS IN A SHIFTING MARKET

2023-26 Appliance Revenue & EBITDA
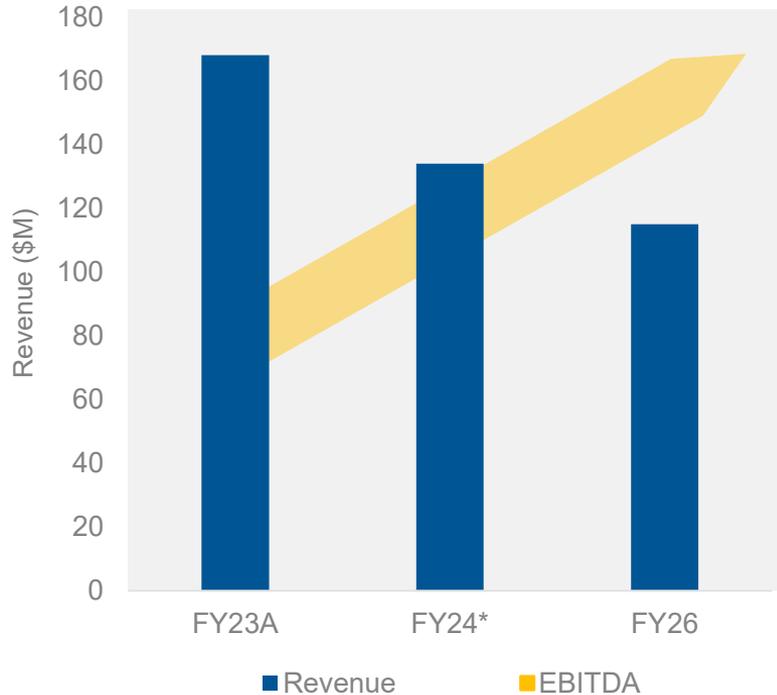
2023: $168M revenue

Market share leadership

Strong recurring SLA revenue

2026: $115M revenue

Maintaining current market share leadership

Lower revenues while increasing EBITDA due to FY24 restructuring actions

* Midpoint of FY2024 guidance (April 29, 2024)

UPDATED STRATEGY
FOCUSED INVESTMENT – INCREASED PROFITABILITY

harmonic.

1 WHAT

A New Strategy

Right-sized the business

Focusing only on the profitable core products

Focusing sales effort on profitable geographies

2 WHY

Strengths Across the Board

Harmonic's brand, track record, support and reliability of the products

XOS is the most reliable media processor in the market

Spectrum is the gold standard with refreshes expected in 2025/26

3 RESULT

▼

Maintaining market share and increasing profitability across Appliance market

▲

STRONG, TRUSTED PARTNERSHIPS
HARMONIC REMAINS THE VALUED LEADER

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XOS

astro | AT&T tv | BBC | CANAL+

Charter COMMUNICATIONS | COMCAST | T·· | foxtel

J:COM | M6 | NBC | NHK

orange | PCCW 電訊盈科 | SES | sky

SKY Perfect JSAT Group | StarHub | vodafone

Spectrum™ X

arte.tv | Bally's INTERACTIVE | beIN MEDIA GROUP | CANAL+

france·tv | gray Television·Digital·Mobile | (Al Jazeera logo) | M6

NBC | QVC | SCRIPPS | RED BEE

SES | sky | SKY Perfect JSAT Group | Televisa

4 | TV5 | Virgin media
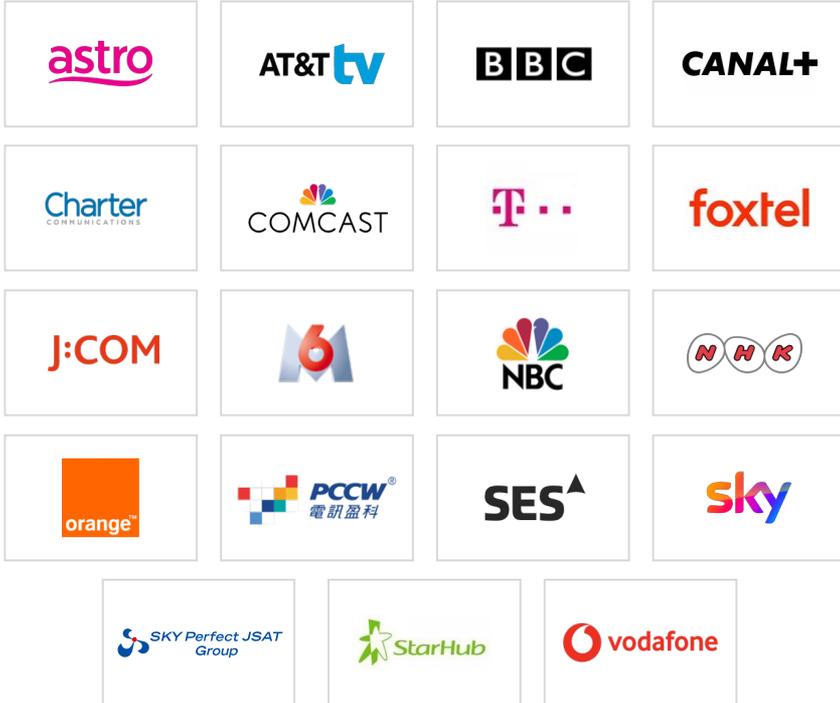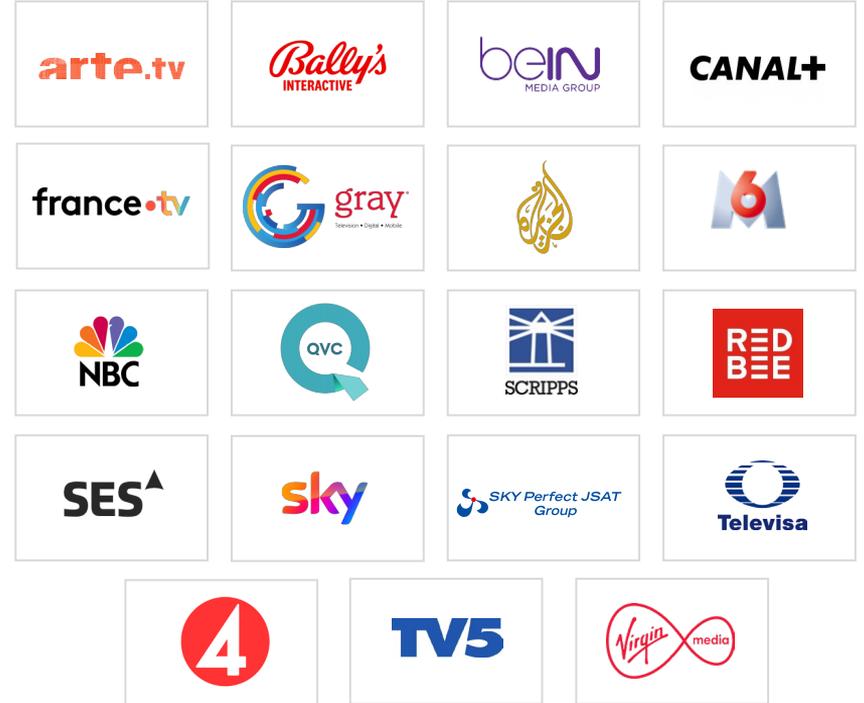
XOS – THE MOST ADVANCED MEDIA PROCESSOR IN THE MARKET

XOS

| Ingest | Playout | Graphics | Transcode |
| Statmux | Multiplexing | Encrypt | Package |

CONTINUING FUNCTION COLLAPSE

- Cost savings for customers
- Leverage common software foundation shared with our cloud offering – streamline engineering resources

TAM EXPANSION

- Reception device for distribution projects including hybrid IP distribution in the cloud
- Ready-to-air channel origination

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SPECTRUM – GOLD STANDARD WITH A POWERFUL REFRESH CYCLE

harmonic

Spectrum X

Installed base refresh cycle
EOS channels
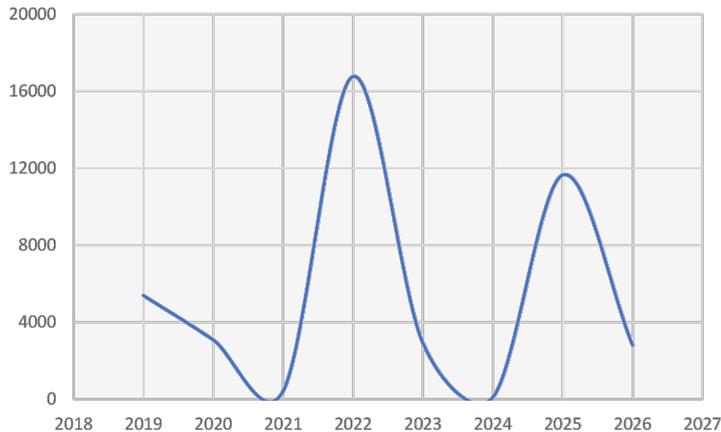
POWERFUL REFRESH CYCLE FROM 2025
- Tens of thousand channels to be refreshed in 2025-26

TAM EXPANSION
- News/live studio/non-live studio production workflows
- New cost-effective offering for ingest-only use case
- Technology adoption including JPEG-XS, 2110, UHD, HDR and more

ANALYST DAY 2024

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CLOUD BUSINESS
TWO GROWTH VECTORS
DRIVING $100M REVENUE
BY 2026

CLOUD BUSINESS
VOS – A TRACK RECORD OF GROWTH

Cloud Revenue

RAPID GROWTH
- 59% CAGR (2020-23)

MARGIN EXPANSION
- GM% >58% in 2023
- Long-term GM% target of 75%

GROWTH DRIVERS
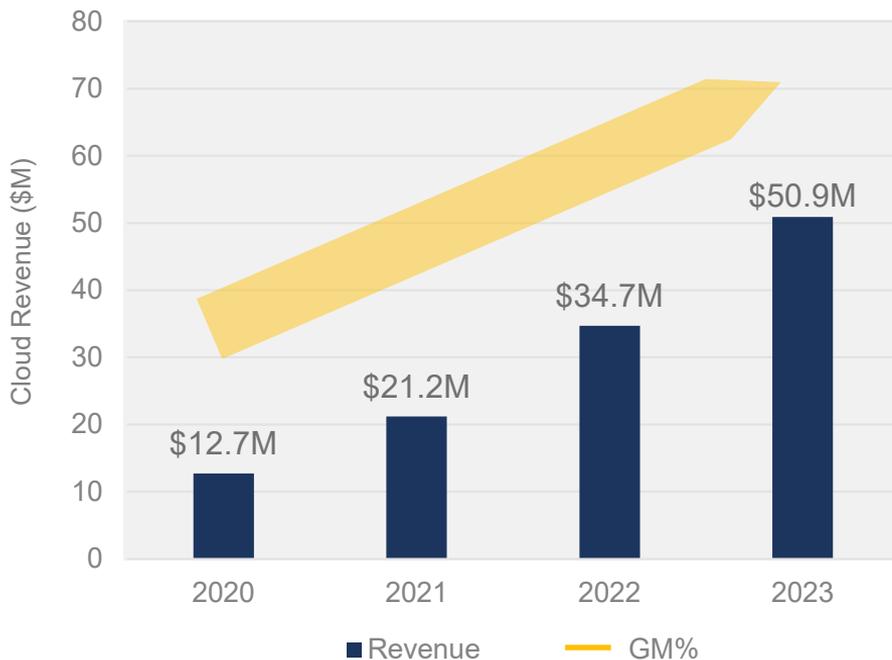- Live sports, linear & VOD streaming, including targeted ads and more recently broadcast cloud migration

CLOUD APPLICATIONS AND CUSTOMERS
SOME OF THE INDUSTRY'S STRONGEST RELATIONSHIPS

harmonic

Live Sports	Linear & VOD Streaming	Broadcast Cloud Migration (Overlap with Appliance business)
FORTUNE 100 COMPANY, Bally Sports, beIN SPORTS, Peacock, WRC, sky sports, VIEWLIFT, Madison Square Garden, DYN, YES	sky, 4, DIRECTV stream, amdocs, MEO, TV5, SBS, Claro, Abu Dhabi Media Network, OSN, etisalat, breezeline	globo, telefe, dish, Warner Bros. Discovery, SES, DIRECTV, Televisa Univision, Weigel Broadcasting Co
45% of Cloud revenue	**40%** of Cloud revenue	**15%** of Cloud revenue

LIVE SPORTS OPPORTUNITY
FANS ARE MASSIVELY SHIFTING SPORTS TO STREAMING

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SPORTS LIVE

▶ WATCH NOW

41% of global fans now stream live sports through digital platforms*

Better User Experience
Live, DVR, any device, anywhere, with data

Wider Reach
Dark markets, esports, women sports, niche sports

More Innovation
Multicam, highlights, interaction, 4K, AR, VR, AI

Better Advertising
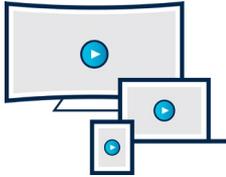Brands can better address fan communities

* Source: Nielsen Sports' 2022 marketing report

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

harmonic.

Exceptional Video Quality & Latency

Unparalleled Resiliency with 24/7 DevOps

24/7
365

Proven at Scale

Ecosystem of Partners

Sports Specific Features

Ready for the Future

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

harmonic

Exceptional Video Quality & Latency

Unparalleled Resiliency with 24/7 DevOps

Proven at Scale

Ecosystem of Partners

r/notredamefootball · 4 mo. ago

Anyone notice how much better the streaming quality is on Peacock vs YouTubeTV?

Kartik Krishnaiyer @kkfla737 · Jul 21
Pro tip for tonight US game. If you can handle Spanish language commentary, the picture on **Peacock** has been the best I've ever seen for soccer on broadcast or streaming EVER.

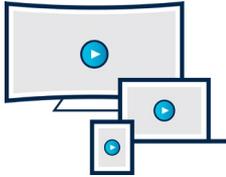# HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

Exceptional Video Quality & Latency

Unparalleled Resiliency with 24/7 DevOps

24/7 365

Proven at Scale

Global team working **24x7** to monitor every aspect

Bringing broadcast standards to streaming for **zero tolerance events** like live sports

Unparalleled **resiliency**

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

Exceptional Video Quality & Latency

Unparalleled Resiliency with 24/7 DevOps

Proven at Scale

2021

6.3M
Peak concurrency

Super Bowl LVI,
EPL,
Beijing Olympics,
all on same day!

2022

10.8M
Peak concurrency

Single
FIFA World Cup
customer

2024

16.3M
Peak concurrency

Jan 13th - Biggest
streaming event
in US history

Ready for the Future

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

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Exceptional Video
Quality & Latency

Unparalleled Resiliency

Proven at Scale

Ad Tech Partners

- Google Ads
- Magnite
- FreeWheel
- MIRRIAD
- Ryff
- viamedia
- EQUATIV
- Castoola+

CMS Partners

- COMCAST TECHNOLOGY SOLUTIONS
- DIAGNAL
- firstlight MEDIA
- ALPHA Alpha Networks Inc.
- deltatre
- NAGRA
- quickplay
- SeaChange
- viaccess-orca
- VIEWLIFT

Ecosystem of Partners

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

Exceptional Video Quality & Latency

Dedicated workflows for live sports streaming

Unparalleled Resiliency with 24/7 DevOps

Watermarking as a service **(WaaS)**

Elite VQ **(Video Quality)**

Proven at Scale

Server-side ad insertion **(SSAI)**

Ecosystem of Partners

Sports Specific Features

Ready for the Future

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN SPORTS

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Exceptional Video Quality & Latency

Partnership for advanced workflows using AI

Unparalleled Resiliency with 24/7 DevOps

Enabling Tier 1 sports workflows for lower tier with no manual labor

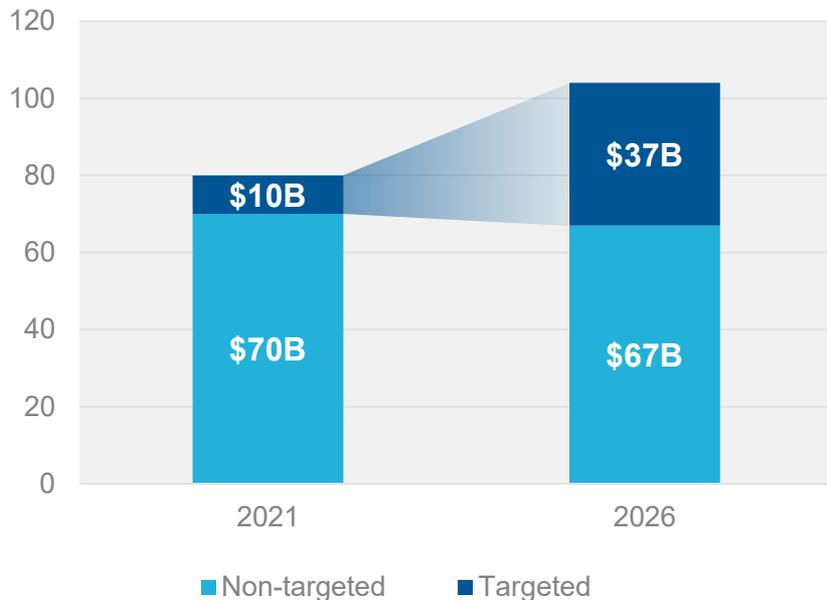Advanced CODECs like VVC to be tested at coming Olympics

Proven at Scale

CAMB.AI   CONTENTWISE   SPIDEO

leankr   OpenAI   VVC   KEBULA

Ready for the Future

TARGETED ADVERTISING OPPORTUNITY
EXPLOSIVE GROWTH

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2021-26 US TV Ad Spend ($B) [1]

Bar chart showing US TV Ad Spend:
- 2021: $70B Non-targeted, $10B Targeted (total ~$80B)
- 2026: $67B Non-targeted, $37B Targeted (total ~$104B)

Legend: ■ Non-targeted ■ Targeted

- Streaming allows targeted ads with monetization based on actual impressions
- Critical for premium content & live sports
- Targeted ads attract new advertisers
- CTV, an increasingly important component of ad spending
- H1'23 YoY targeted ad view growth at 9% [2]
- New ad formats can yield higher engagement and higher CPMs

Why we win
in ad insertion

HARMONIC INDUSTRY LEADERSHIP
WHY WE WIN IN AD INSERTION

In-Stream
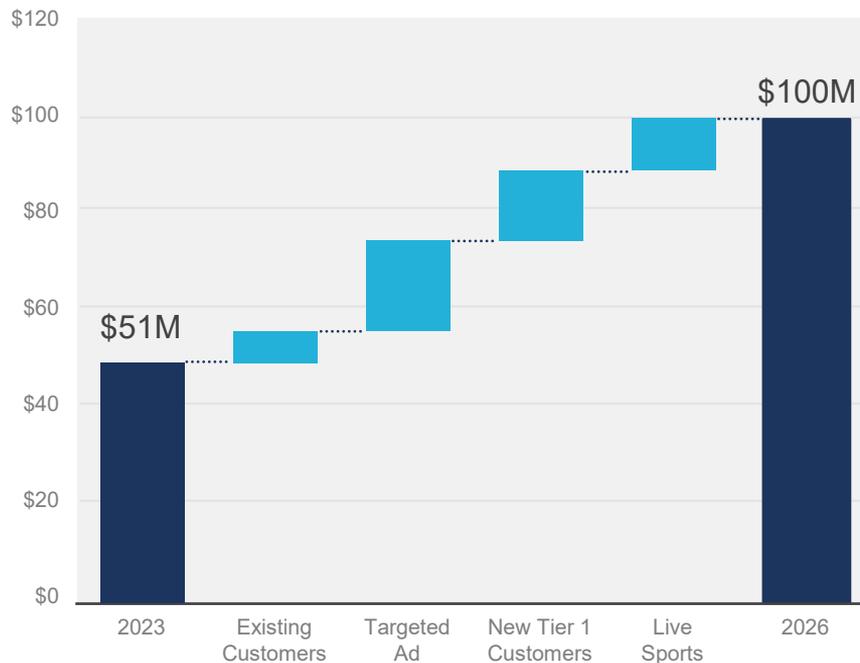
HOW WE GROW
THE PATH TO $100M

2023-26 Cloud Revenue Growth Drivers ($M)

CAGR 25%

TARGETED AD
- New In-Stream advertising formats

NEW TIER 1 CUSTOMERS
- Dedicated go-to-market & sales focus
- New hybrid Cloud & Appliance workflows

LIVE SPORTS
- AI additions to automate the live sports workflow
- Innovative features: WaaS, Elite VQ, In-Stream Ad

VIDEO TARGET MODEL 2026 ($M)[1]

Financial Metric	2023	2024[2]	2026 Model	3-year CAGR
Revenue	$219	$190	$215	-1%
Appliance	$168	$134	$115	-12%
SaaS	$51	$56	$100	25%
Gross Margin[1]	60.9%	63.0%	64.0%	-
Adj. EBITDA[1]	$(3)	$3	$30	nm
Adj. EBITDA Margin[1]	(1.6)%	1.3%	14.0%	-

Key Highlights

REVENUE
Growth driven entirely by SaaS, while Appliance holding current market share in a TAM contracting market

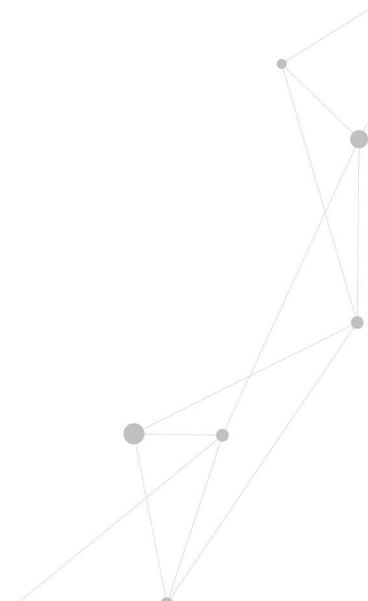### GROSS MARGIN
Continued expansion from increased SaaS

EBITDA
Significantly improved as result of FY24 restructuring actions and leverage on SaaS growth

[1] Non-GAAP

[2] Midpoint of FY2024 guidance (April 29, 2024)

APPENDIX

GAAP TO NON-GAAP RECONCILIATION ($M)[1]

	2023 Actual	2024 Guidance[2]
GAAP gross profit	$313	$346
Stock-based compensation expense	$2	$1
Restructuring and related charges	$1	$2
Total adjustments	$3	$3
Non-GAAP gross profit	$316	$349
Net revenue	$608	$670
GAAP gross margin	51.4%	51.6%
Non-GAAP gross margin	51.9%	52.1%

[1] Components may not sum to total due to rounding

[2] Midpoint of FY2024 guidance (April 29, 2024)

GAAP TO NON-GAAP RECONCILIATION ($M)[1]

	2023 Actual	2024 Guidance[2]
GAAP net income	$84	$29
Provision for (benefit from) income taxes	$(65)	$9
Interest expense, net	$3	$8
Depreciation	$12	$13
EBITDA	$34	$59
Adjustments		
Stock-based compensation	$27	$28
Restructuring and related charges	$1	$17
Non-recurring advisory fees	$5	-
Impairment loss	-	$6
Non-GAAP total consolidated segment adjusted EBITDA	$68	$110
Net revenue	$608	$670
GAAP net income margin	13.8%	4.3%
Non-GAAP adjusted EBITDA margin	11.1%	16.4%

[1] Components may not sum to total due to rounding

[2] Midpoint of FY2024 guidance (April 29, 2024)