DLNA: THE CONNECTED CONSUMER EXPERIENCE

Global Connections

DLNA Leadership

Board of Directors

- Consumer Electronics
- Mobile Devices
- Personal Computers
- Service Providers
- Automotive
- Semiconductor

dlna

230+ Global Members

Accton Technology Corporation
Acer Incorporated
Actiontec Electronics Inc
Advanced Digital Broadcast SA
Airties Wireless Network
Alcatel-Lucent
Allegro Software Development Corporation
Allion Test Labs, Inc.
Alpha Networks, Inc.
Alpha Systems, Inc.
Altec Lansing Australia PTY LTD
Alticast Corporation
Amlogic, Inc.
Analog Devices, Inc.
Aplix Corporation
ARCELIK A.S. ELEKTRONIK ISLETMESI
ArcSoft, Inc.
Aricent
Arkuda Digital LLC
ARRIS Group
Askey Computer Corp.
ASUSTek Computer Inc.
Atheros Communications, Inc.
AVM GmbH
Axis Communications
BBK AV Electronics Corp., Ltd.
Belkin Corporation
Best Buy
Bose Corporation
BridgeCo
British Sky Broadcasting Ltd.
BT
Buffalo Inc.
Cabot Communications Ltd
Cameo Communications, Inc.
Canon Inc.
Casio Computer Co., Ltd.
Charter Communications
Cognizant Technoloy Solutions
Compal Electronics Inc.
Conax AS
Conexant Systems, Inc.
Continental Automotive GmbH
Cox Communications
CSR
Cyberlink Corp.
CyberTAN Technology, Inc.
D&M Holdings Inc.
D-Link Systems, Inc.
Dell Inc.
Desay A&V Science and Technology Co., Ltd.
Deutsche Telekom AG
DigiOn, Inc.
DivX Inc.
Eastech Electronics (Taiwan) Inc.
Eastman Kodak Company
Echostar Technologies LLC
EMC
Entropic Communications, Inc.
Espial Group Inc.
ETRI
Foster Electric Company
France Telecom
Fraunhofer IIS
Freecom Technologies Limited
Frontier Silicon Ltd.
Fujitsu Limited
Funai Electric Co., Ltd.
Fuzhou Rockchip Electronics Co., Ltd.
Gemtek Technology Co., Ltd.
Guangdong Hybroad Vision Electronic Technology Corporation
Haier Group
Harman International Industries, Inc.
HCL Technologies Ltd.
Heartland Data Co., Inc.
Hisense Electric Co., Ltd.
Hitachi, Ltd.
HTC Corporation
Humax Co., Ltd.
HYUNDAI Digital Technology Co., Ltd.
I-O Data Device, Inc.
iCube Corp.
iLook Corporation
Imagination Technologies Ltd.
Imation Corp.
INFOCITY, Inc.
Inkel Corporation
inXtron, Inc.
Irdeto Corp.
Jabil Circuit
Japan Cable Laboratories
JetHead Development, Inc.
JVC KENWOOD Corporation
KAONMEDIA Co., Ltd.
KAT Digital Corp.
Kathrein-Werke KG
KDDI R&D Laboratories Inc.
KeyStone Semiconductor Corp.
KT Tech Inc.
LaCie
Lenus Co., Ltd.
LITE-ON IT Corporation
LITE-ON Technology Corp
Loewe Opta GmbH
Logitech Inc.
Marvell International Ltd.
MediaTek Inc.
Mitsubishi Electric Corporation
Mitsumi Electric Co., Ltd.
Morega Systems Inc
MStar Semiconductor, Inc.
Myriad Group
NAD Electronics International
Nagravision SA
NDS
NEC Corporation
Nero AG
Netgear Corporation
Neusoft Corporation
Nikon Corporation
Nippon Telegraph and Telephone Corp.
Niveus Media, Inc.
Novatek Microelectronics Corp
Novatel Wireless, Inc.
Nvidia
Oki Electric Industry Co., Ltd.
Olympus Corporation
ONKYO Corporation
Oregan Networks Ltd.
Pace plc
PacketVideo Corporation
Pantech Co., Ltd.
Parrot SA
Patriot Memory LLC
PCCW
Philips Consumer Lifestyle
Pioneer Corporation
PLX Technology
Prime Electronics & Satellitics Inc.
Qwest Communications
Ralink Technology Corporation
Realtek Semiconductor Corp.
Renesas Electronics Corporation
Research In Motion
Rogers Communications
Rovi
RT-RK
Sagemcom
Seagate Technology
Seiko Epson Corporation
Selex Elsag S.p.A.
Semp Toshiba Amazonas SA
SFR
Sigma Designs, Inc.
Sitecom Europe BV
SK Telesys
SKY Perfect JSAT Holdings
sMedio, Inc.
Sony Ericsson Mobile Communications AB
Sphairon Technologies GmbH
STMicroelectronics
Sumitomo Electric Industries, Ltd
Sunniwell Co., Ltd
Synology Incorporated
TATUNG Company
TCL Corporation
TechniSat Digital GmbH
Teleca Ltd
Telechips Inc
Telecom Italia
Telefonica S.A.
TeliaSonera AB
Telstra
Testronic Laboratories Belguim NV
Texas Instruments
Time Warner Cable
Top Victory Investments Ltd.
Toshiba Corporation
TranSwitch Corporation
Trident Microsystems (Far East) Ltd.
Ubee Interactive Inc.
Ubicom, Inc
Ubiquitous Corporation
Ubivelox, Inc.
Uniden Corporation
VIA Technologies, Inc.
ViewSonic Corporation
VisualOn Inc.
VividLogic Inc.
ViXS Systems, Inc.
Vodafone Group Services Ltd.
Western Digital
Wistron Corporation
WYPLAY
XXCAL Japan Inc.
Yamaha Corporation
Zhong Shan City Litai Electronic Industrial Co. Ltd.
Zinwell Corp.
Zoran Corporation
ZTE Corporation
ZyXEL Communications Corporation

Recent DLNA News

- More than 12,000 DLNA Certified® Products
- DLNA Interoperability Guidelines for Premium Video
- DLNA Certification for Consumer Software Applications
- DLNA Protected Streaming Certification
- DLNA Guidelines Become International Standards
- Growth in Europe, Japan, China

DLNA Certified Models

4,642
Televisions

5,710
Personal Computers

329
Audio Video Receivers

498

Blu-ray &DVD Players

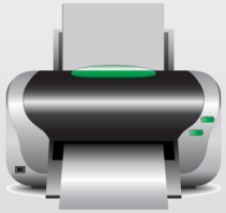
281
Network Attached Storage

277

Mobile Devices

79

Set Top Boxes



40
Printers

20

Cameras/Camcorders

4 Software

7
Photo Frames

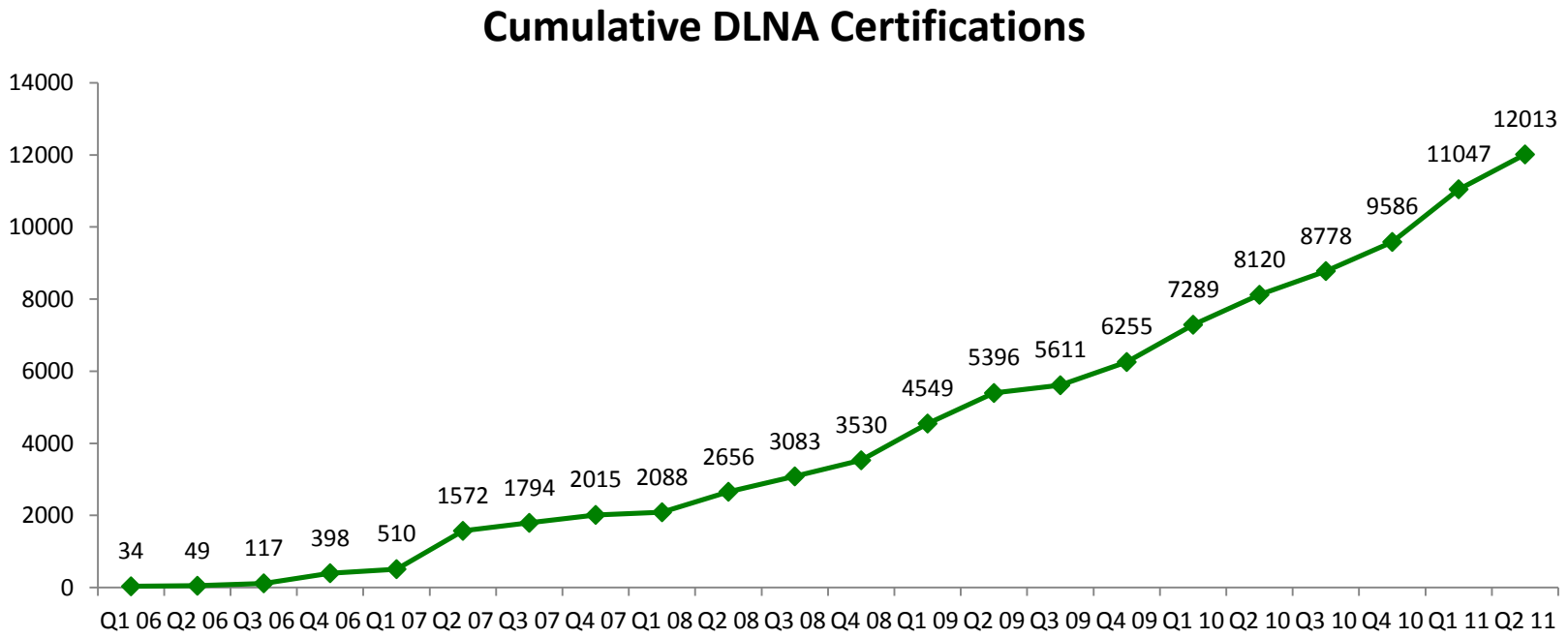
44
Gateways/Routers

3
Game Consoles

47
Tablets

7
Appliances

Growth in Certified Devices



2006 → 2011

- Certifications for players and servers
- Certifications mobile devices, printers and renderers
- Certifications for "Play to" & "Print to", and "Upload/Download"
- Consumer Software and DLNA Protected Streaming Certifications
- Guidelines for Premium Commercial Content

Premium Video

- New DLNA Interoperability Guidelines
  - Developed in conjunction with service providers
  - Advances digital delivery of movies and network television to home
  - Enables playback across digital televisions, Blu-ray disc players, game consoles and set-top boxes

DLNA Software Certification

- DLNA Software Certification Available Now
  - Consumer software certified via DLNA Certification process
  - Available directly to consumers via app stores, web or retailers

- Helps consumers to:
  - Upgrade non-DLNA Certified® products into personal DLNA ecosystem
  - Enjoy and share photos, videos and music across a broader range of products

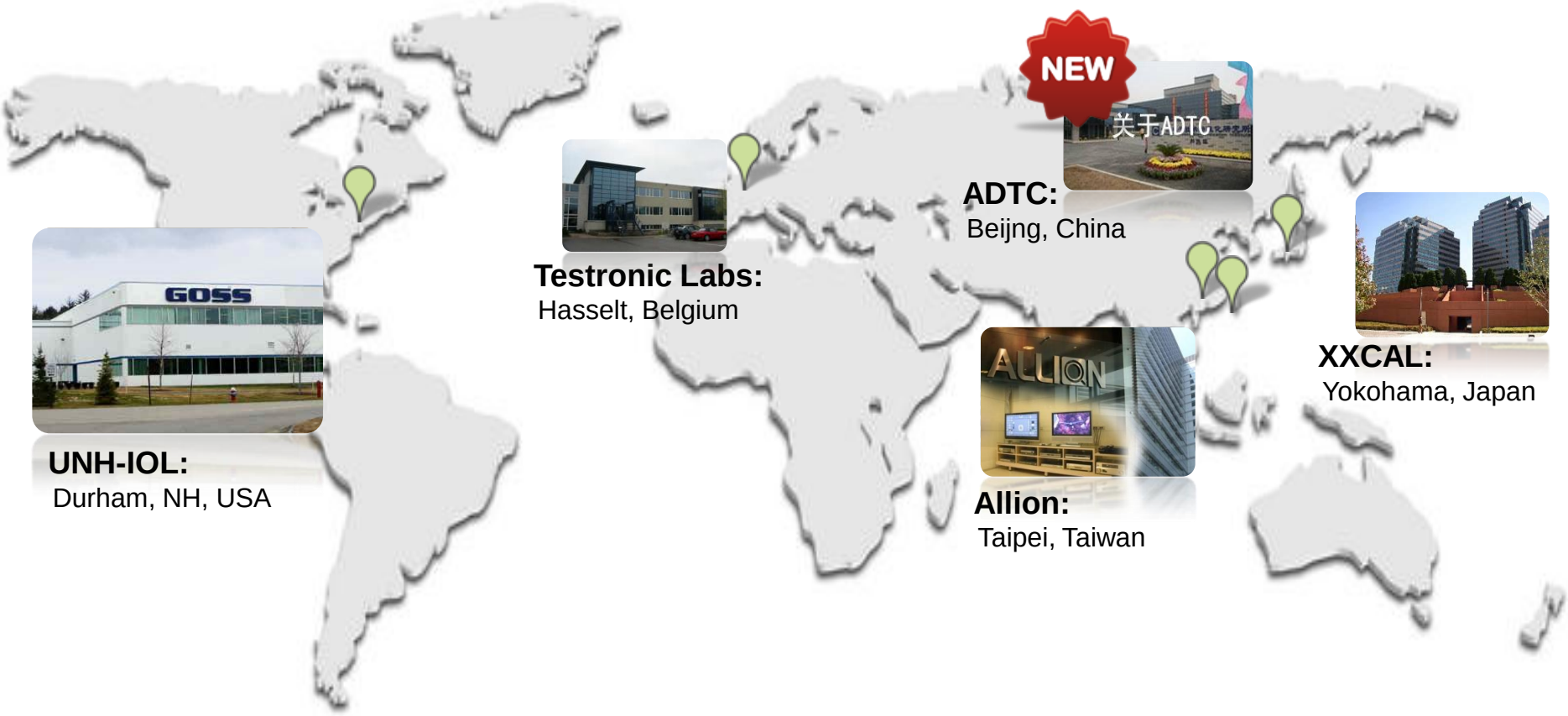
DLNA Protected Streaming

- DLNA Protected Streaming Certification available now
- Allows consumers to watch commercial movies across DLNA Certified® products
  - Leverages Digital Transmission Content Protection over Internet Protocol (DTCP-IP)
  - Content can be shared securely between devices in a user's home network
  - Preserves rights and interests of copyright owners and content providers
- Recognized as International Standard by IEC
- DTCP-IP Technology Endorsed by Content Providers

Recognized International Standard

- The International Electrotechnical Commission (IEC) recognizes DLNA as an industry standard
  - IEC first published international standards for content sharing applications across home networks in 2007
  - Based on DLNA guidelines
    - IEC 62481-1: DLNA Architecture and Protocols
    - IEC 62481-2: DLNA Media Formats Profiles
  - DLNA Link Protection Guidelines adopted in 2010
    - IEC 62481-3: DLNA Link Protection

DLNA Global Expansion



UNH-IOL:
Durham, NH, USA

Testronic Labs:
Hasselt, Belgium

ADTC:
Beijng, China

Allion:
Taipei, Taiwan

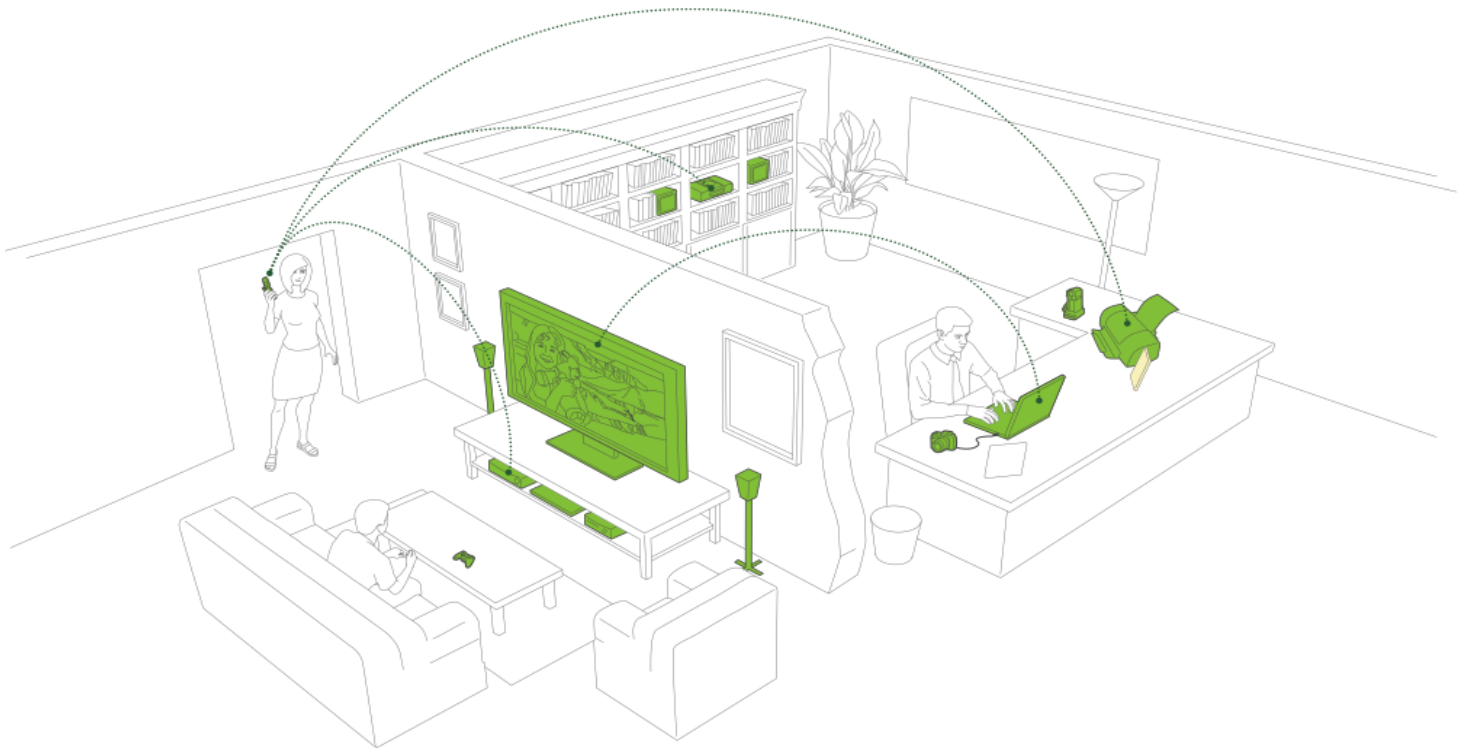
XXCAL:
Yokohama, Japan

Look for the Logo…

- DLNA Certified® products:
  - Facilitate better, easier sharing of digital content throughout the home
  - Are designed so that products will work together now and in the future
- Product categories are expanding
  - Routers, appliances and tablets all recently added

Stay Connected with DLNA

- Visit us online at: www.DLNA.org
- Find us on:
  - Facebook: www.facebook.com/dlnacertified
  - Twitter: www.twitter.com/DLNA
  - YouTube: www.youtube.com/DLNAChannel
- Locate DLNA Certified® Products online at: www.dlna.org/products or via mobile application stores



DLNA: The Connected Consumer Experience

QUESTIONS?

DLNA: Interoperability at All Layers

Narrowing the plethora of standards to a mandatory small set

Link Protection	DTCP-IP	How commercial content is protected on the Home Network
Media Formats	MPEG2, AVC/H.264, LPCM, MP3, AAC LC, JPEG, XHTML-Print + optional formats	How media content is encoded and identified for interoperability
Media Transport	HTTP Quality of Service	How media content is transferred
Media Management	UPnP AV 1.0 UPnP Print Enhanced 1.0	How media content is identified, managed, and distributed
Discovery & Control	UPnP Device Architecture 1.0	How devices discover and control each other
IP Networking	IPv4 Protocol Suite	How wired and wireless devices physically connect and communicate
Connectivity	Wired: Ethernet 802.3, MoCA Wireless: Wi-Fi 802.11, Wi-Fi Protected Setup	