This report examines the catalysts and inhibitors for connected consumer electronics. It specifically focuses on the key technology components – including home networking, media processing, and device discovery and media server software. The report also provides definitions and profiles of various CE devices and includes worldwide forecasts.

The connected consumer electronics market is driven by several factors, but none perhaps more significant than the rise of premium access content services – such as multichannel television and broadband Internet offerings – and the continued trend of centralized digital media in the home,” said Kurt Scherf, vice president and principal analyst with Parks Associates. “The pace of product and service development in this space will grow more intense as the market is joined in force by CE manufacturers, service providers, retailers, and the content industry.”

1.0 Notes on Methodology
1.1 Data Sources
1.2 Companies Briefed

2.0 Why Connected CE and Why Now?
2.1 Taking Home Networking Beyond the Pure Data Play
2.2 Connected CE and Media Trends: Served and Streamed
  2.2.1 Drivers for the Media Server-Connected CE Vision
  2.2.2 Drivers for the Cloud Media-Connected CE Vision

3.0 Connected CE Product Overview
3.1 Connected Game Consoles
  Microsoft Xbox 360
  Sony PlayStation 3
  Nintendo Wii
3.2 Media Center PCs
3.3 Multi-room DVR and Connected Set-top Boxes
  AT&T
  Bright House
  Cox Communications
  DISH Network
  Time Warner Cable
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Verizon

3.3.1 PC-to-Set-top-Box Links

3.3.2 Place-shifting

   EchoStar Technologies

3.4 Digital Media Adapters

   Notable Digital Media Adapters
   - Buffalo LinkTheater™ HD Digital Media Player
   - D-Link (DSM-330) DivX Connected™ HD Media Player
   - KODAK Theatre HD Player
   - NETGEAR Digital Entertainer HD (EVA8000)
   - Popcorn Hour A100

   Media Center Extenders
   - D-Link DSM510 & DSM-750 MediaLounge
   - Linksys Media Center Extender DMA 2100 and DMA 2200
   - Microsoft Xbox 360

3.5 Network-attached Storage/NAS Media Servers

   Buffalo
   - Cisco
   - Fujitsu-Siemens Computers
   - Helios
   - HP
   - Iomega
   - LaCie
   - Philips
   - Promise Technology
   - TranquilPC
   - ZyXEL

   DVR Storage Expanders
   - Apricorn DVR Xpander
   - Seagate Showcase™
   - Western Digital My DVR Expander

3.6 Cloud Media Set-top Boxes

   2Wire MediaPoint Digital Media Player
   - Apple TV
   - NETGEAR Internet TV Player (ITV 2000)
   - NeuLion Sky Angel
   - Personal Web Systems @CCESS
   - Popcorn Hour (Syabas)
   - Roku Digital Video Player
   - Sezmi Digital Media Player
   - TiVo
   - TVBlob BLOBbox
   - Verismo Networks VuNow VN1000HD
   - VUDU
   - WhereverTV Receiver
   - ZillionTV

3.7 Connected TVs

   LG Electronics
   - Panasonic
   - Samsung
   - Sony
   - Toshiba
   - VIZIO

3.8 Connected Blu-ray Players
LG Electronics
Panasonic
Pioneer
Samsung
Sony

3.9 Networked Audio Systems
Cobra
Linksys by Cisco Wireless Home Audio
Logitech® Squeezebox™ Boom
NETGEAR Digital Entertainer Elite EVA9150
Philips Streamium Network Music Player
Roku SoundBridge
Sonos
Sooloos

3.10 Connected Photo Frames
Coby
D-Link
GiiNii
HP
Haier
Ipevo

4.0 Key Technologies for Connecting CE
4.1 Home Networking Technologies
4.1.1 "No-New-Wires"
Home Networking Deployments by Service Providers
HomePNA
HomePlug
DS2/UPA
MoCA
Panasonic HD-PLC
Ruckus Wireless
Consumer Electronics with Certified Networking
HomePNA
MoCA
"No-New-Wires” Networking Solutions
HomePNA
MoCA
DS2/UPA
HomePlug
Panasonic HD-PLC
"Single-chip” Standards Efforts
ITU G.hn 9960
IEEE P1901
4.1.2 Wireless
802.11b
802.11a
802.11g
802.11n
Wi-Fi Enhancements for Consumer Electronics
Aceury
Celeno
ProVision Communications
Quantenna
Ruckus Wireless
Next-generation Wireless Solutions
WHDI™ (AMIMON)
WirelessHD®

4.1.3 Extending the Interface
Gennum
HANA
Icron
Synerchip/Diiva
Valens Semiconductor

4.2 Connectivity Software
4.2.1 Device Discovery Solutions
4.2.2 Connectivity/Media Server/Media Player Software
ACCESS
Allegro Software
Avega Systems
AwoX
BridgeCo
Digion
J. River
Macrovision
PacketVideo
Syabas
Wyplay

4.3 Silicon – Media Processing and System on Chip
Broadcom 35xx and 74xx series
Intel CE 3100
Mediatek MT5xxx, MT8xxx, and MT13xx
Micronas
NXP 225 and TV550
Sigma Designs 86xx series
STMicroelectronics STi71xx

4.4 User Interfaces

4.5 Security and Content Protection
Content Protection and Rights Management Entities of Note
Coral Consortium
Digital Entertainment Content Ecosystem (DECE)
Digital Transmission Licensing Authority
DVD Copy Control Association
Marlin Community
Open Market Initiative (OMI)
Open Mobile Alliance (OMA)
New Efforts in Conditional Access
Verimatrix
Widevine

4.6 Bringing Web Services to the TV
Accedo Broadband
ActiveVideo Networks
Adobe
Alitcast
AnySource Media
AwoX
chumby®
ClearLeap
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DivX
Dreamer
FrameMedia
GridNetworks
Mediafly
MediaMall Technologies
MediaMelon
Move Networks
Opera Software
Oregan Networks
Personal Web Systems
Rallypoint
SEN-CE
sofatronic
Sonic Solutions
Syabas
SyncTV
Verismo Networks
Vuze
WhereverTV
Windows Live FrameIt
Yahoo!

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5.1 Connected TVs
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5.3 Connected Game Consoles
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5.5 Network-attached Storage Devices
5.6 Multi-room DVR
5.7 Digital Media Adapters

6.0 Conclusions and What to Watch

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Connected TV System-on-Chip Solutions
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Content Protection and Rights Management Entities of Note
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Web-on-TV Solutions
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Connected Blu-ray Players: Unit Sales
Network-attached Storage: Unit Sales
Multi-Room DVR: Net Additions
Digital Media Adapters: Unit Sales

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