



SAFIA

SAFIA Content Protection Technologies for iVDR

SAFIA License Group

SAFIA: Security Architecture For Intelligent Attachment device
iVDR: information Versatile Disk for Removable usage

What's "iVDR"?

Information Versatile Disk for Removable usage

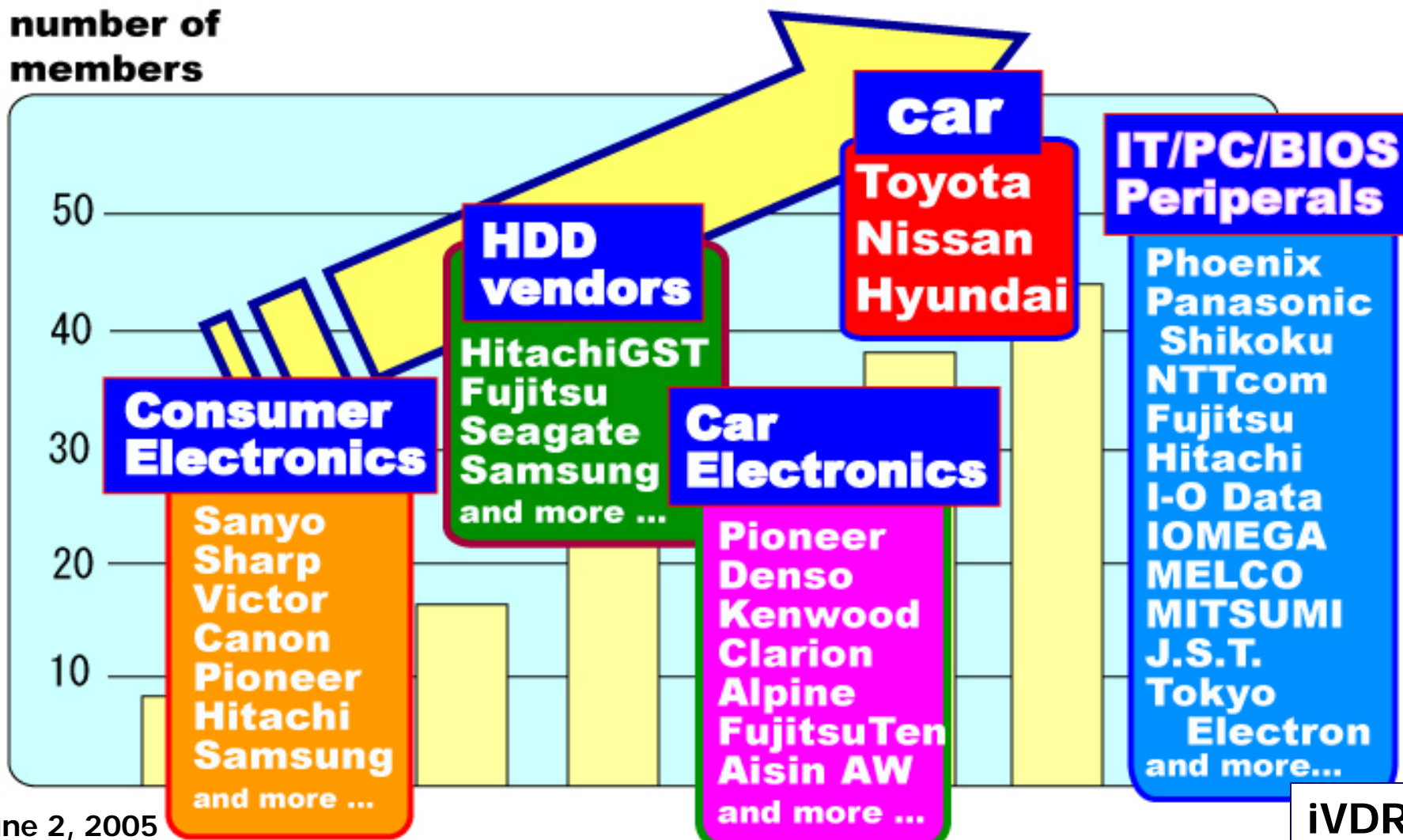
1. Removable
2. Open Industry Standard regardless of manufacturer
 - > **iVDR Consortium**
<http://www.ivdr.org>
3. Common platform for PC and CE usage
4. Large Capacity and High-Speed Access



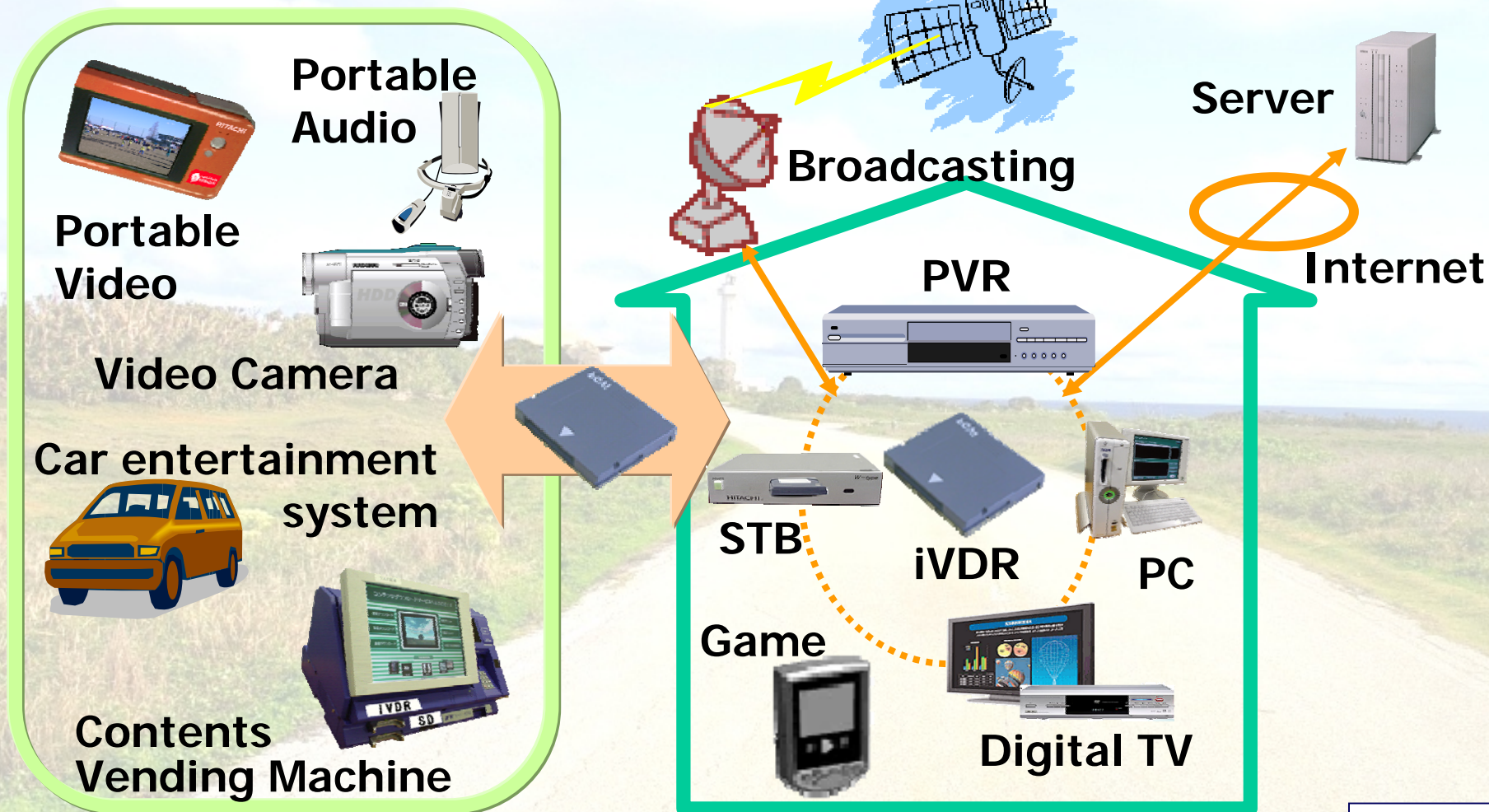
iVDR Consortium

62 Member Companies (As of 9 May.2005)

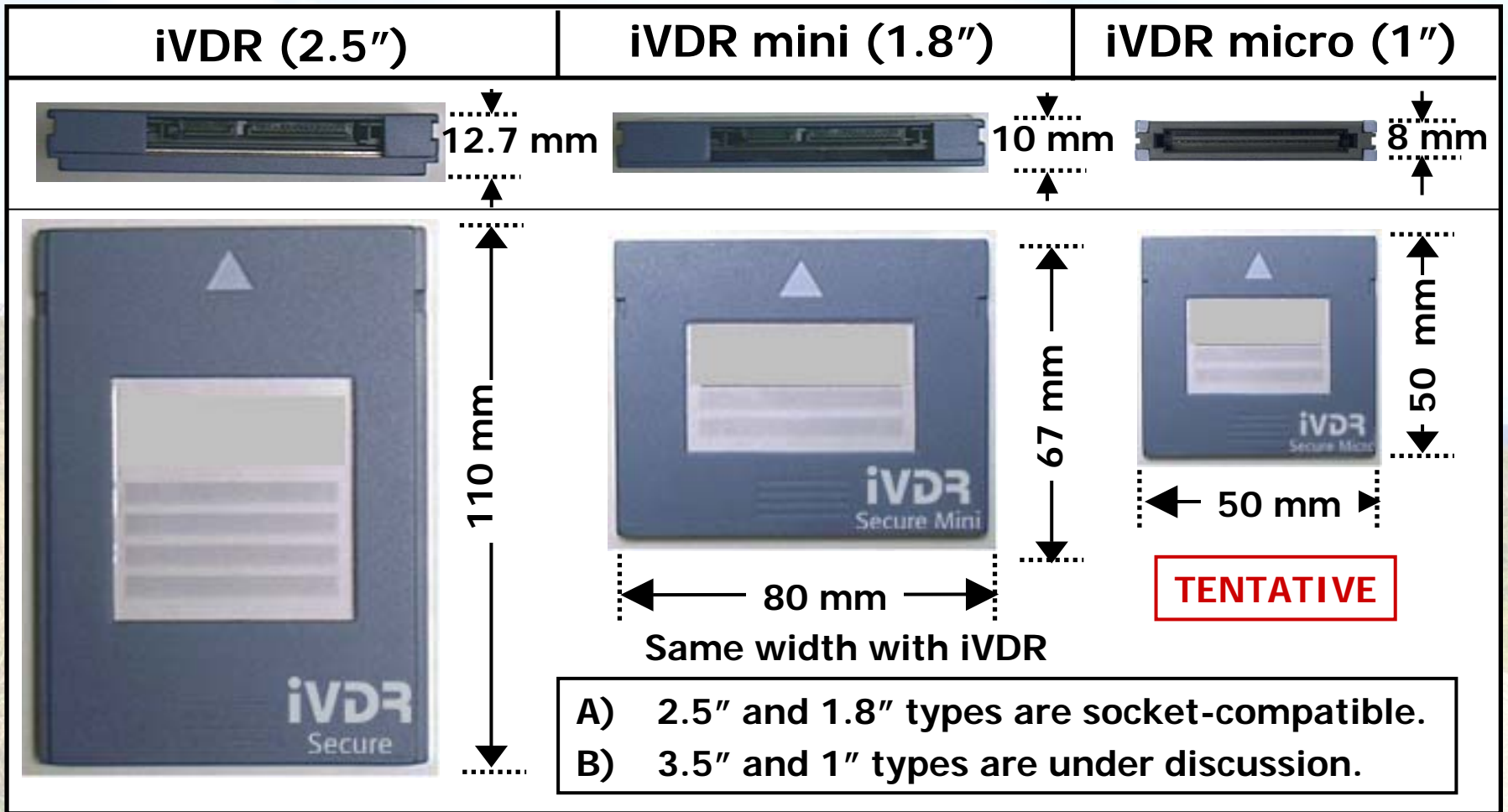
number of members



iVDR , Common platform for PC and CE usage



iVDR Family



Hardware Specifications

Items	Specifications
Shockproof	More than 900G (when not running)
Connector	Connector for iVDR 26 pin (In accordance with Serial ATA)
Durability of Connector	Connect/disconnect 10,000 times (cycles)
Command	ATA Commands

SAFIA License Group

SAFIA

Founders:

Hitachi, Ltd.

Pioneer Corporation

SANYO Electric Co., Ltd.

Sharp Corporation

Formed the Group to develop, promote and license SAFIA.

Objectives

SAFIA

- SAFIA content protection technologies for use with digital recording media utilized by a wide range of devices, from consumer electronics to personal computers.
- SAFIA originally targeted for the iVDR removable HDD (Hard Disk Drive) Standard.
- SAFIA supports development of removable HDD appliances to dramatically enhance the digital entertainment experience.

Targeted Uses for SAFIA

SAFIA

Digital TV
Recording



Map and others



Audio



e-Distribution



Home

Automobile

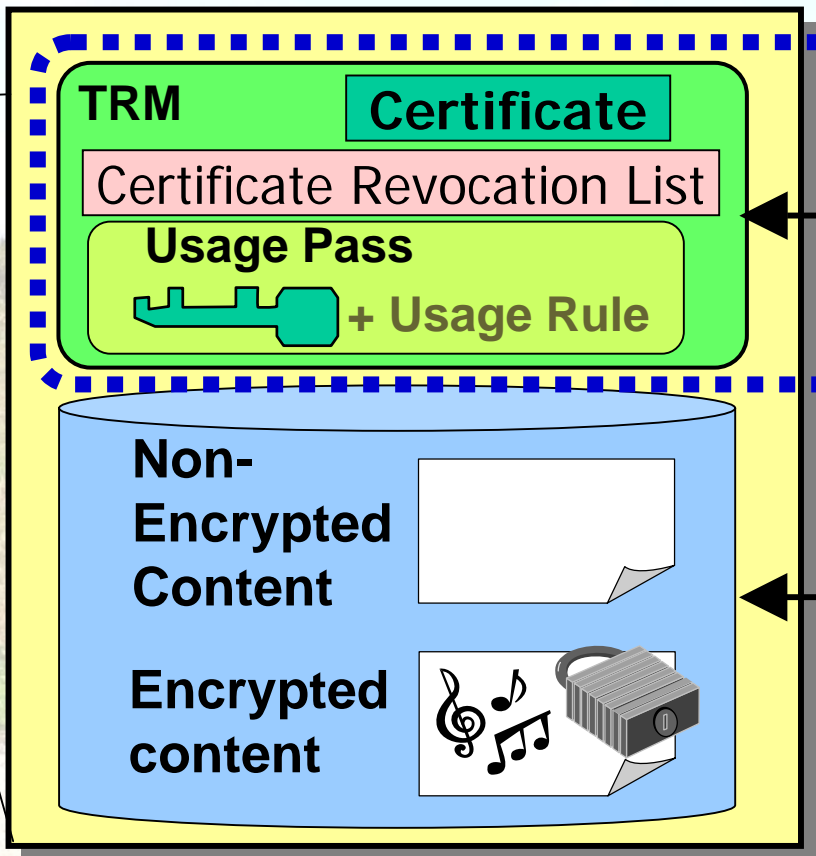
Town



What's "SAFIA"?

SAFIA

iVDR-Secure (iVDR w/SAFIA):
Normal HDD Area + Tamper Resistant Module (TRM)



SAFIA

**Extension
Commands for
Security**

**ATA
Commands**

Features of SAFIA Content Protection

SAFIA

- AES-128 content encryption
- PKI based bi-directional authentication and secure transfer protocol for strong security
- Integration of content encryption key and usage rules for secure content access
- Secure "move and delete" function
- Application-specifiable content usage rules
- High affinity to e-distribution (e.g., super-distribution) of content and key through different channels and timing

Schedule

SAFIA

- **SAFIA** license group plans to finalize the license program for “Digital TV Recording” in detail, including applicable devices and fees, by 2005Q3.
- This program will contribute business opportunities to develop related devices such as iVDR.

■ Web Site

<http://www.safia-lb.com>