

21st June 2012 Techno Systems Research Co., Ltd. URL <u>www.t-s-r.co.jp</u> TSR Bldg., 3-7-4 Iwamoto-cho, Tokyo Japan President Masao Fujita

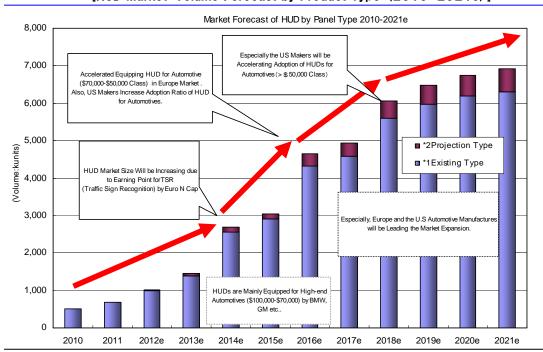
## **TSR - Press Release**

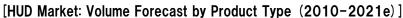
# Next Generation Head Up Display Coming to Automotives

### Emerging Next Generation Head Up Display (HUD) : HUD Market Reached to about 690 k units in 2011, and Its Market Size Will be Growing to about 4,650 k units by 2016~

Techno Systems Research published <sup>¶</sup>Head Up Display Market Research 2011-2012<sup>』</sup>. This market report clarified the Head Up Display market size in 2011.

In 2011, Head Up Display market volume and revenue reached 690k units, 140% growing year on year basis, 245 Million USD, respectively. There promising technologies emerged, which is "Embedded and Small Projector (Pico)" in Head Up Display Market. These technologies could be adapted to Next Generation HUDs, and this Next Generation HUDs will be introduced into the market in 2014.





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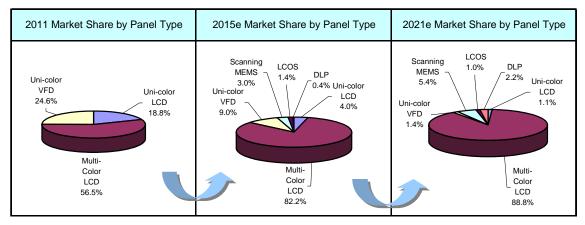
#### [Head Up Display : Market Expansion Factors and Impact on Product Spec.]

TSR estimates that Head Up Display Market will be accelerated to grow after 2014.

There are tow factors for the growing. First, automotive safety systems would be included into criteria by EuroNCAP to earn point, and next, some regulations that strongly support those automotive safety systems to be quipped into automotives would be enacted by 2015. Also, the U.S. automotive makers will be increasing HUD adoption ratio for automotives. Thus, the HUD market will grow to about 7,000 k units, which is 10 times larger than that of 2011.

In this research, possibility of adoption of Embedded and Small Projector technologies for Next Generation HUD is investigated. In future, automotive information will be connecting with Smart Phone and the information will become more multifaceted. Therefore, higher brightness, contrast and resolution are highly demanded in the market, so in order to achieve such demands, HUD makers are adopting Embedded and Small Projector (Pico Projector) technologies.

Also, among the next generation HUD, some equip laser light sources to create added-values. Thus, laser HUDs will be equipped on high-end automotives. On the other hand, prices of exiting models will be reducing, and they will be adopted on middle range and low-end automotives.



### [Head Up Display Market : Market Share by Product Type]

#### **※** Please contact us for more details.

[Contact Information for News Releases and Reports] Techno Systems Research Co., Ltd. Midori Takaso (takaso@t-s-r.co.jp) Junichi Kimura (kimura@t-s-r.co.jp) Tel: +81-3-3866-4505 Fax :+81-3-3866-8248