

# Exhibition Display'06

<http://www.chipexpo.ru>

**Specialized exhibition of displaying technologies and equipment “DISPLAY 2006”  
June 14-16, 2006  
Central House of Artist, Moscow, Russia**

The aims of the exhibition “Display-2006” are the following:

1. to provide an opportunity for consumers of turnkey systems to learn more about up-to-date and most profitable goods and solutions;
2. to offer to design engineers and manufacturers advanced components, development and HMI technologies.

About 4.000 specialists have visited the exhibition. There are customers from transport and industrial facilities, energy sector, military, police, municipal services, clients from advertising, exhibition and entertainment business.

The event was organized by CHIP EXPO Co., Moscow and supported by SID Russia Chapter, Russian Engineering Academy, Federal Agency on Industry, Moscow Department for Science and Technology Policy.

## **Exhibition Subjects:**

- TFT, CRT, LCD
- LED displays and panels
- Plasma displays
- Digital data and matrix indicators
- LCD-projectors
- Laser processing technologies of visualization
- Projection equipment and systems
- Displaying technologies for military and aerospace application
- Electronic components for HMI systems
- Electronic control modules
- Innovative scientific development
- Processing and service technologies
- Integrated data systems service

## **Business program**

Business Program of the event was prepared in cooperation with SID Russia Chapter, it consists of several round-tables, meetings and seminars.

1. June 14<sup>th</sup>, 12.00 – 13.00: Samsung Seminar **“Corporate Solutions of Samsung in displays and video monitoring systems”**
2. June, 14<sup>th</sup>, 13.00 – 15.00: Round-table conference **"TFT, LCD, LED displays and panels for presentation and information systems"**.
3. June, 14<sup>th</sup>, 15.00 – 17.00: Round-table conference **"Displays for city infrastructure and outdoor applications"**

4. June, 15th, 10.00 – 13.00: Round-table conference "**Displaying technology for industrial, embedded and onboard use**"
5. June, 15th, 15.00 – 17.00: Round-table conference "**Russian market of display components**"
6. June, 16th, 10.00 – 12.00: Seminar "**Prospects of new display technologies in Russia and CIS**"
7. June, 16th, 10.00 – 12.00: Seminar "**Integrated information systems**"



General view of the Exhibition



Alexander Bilenko, General Director, CHIP Expo Co.



TPT Project Coordinator Dr. V. Ivanov at the booth of Araneus Co., Russia



Prof. V. Belyaev (SRC) moderates Round-table conference "TFT, LCD, LED displays and panels for presentation and information systems".

## Main presentations/reports

### Business Program, June 14-16

1. June, 14th, 13.00 – 15.00: Round-table conference "**TFT, LCD, LED displays and panels for presentation and information systems**".
2. June, 14th, 15.00 – 17.00: Round-table conference "**Displays for city infrastructure and outdoor applications**"

Presentations of Polymedia Co. (Projection), AR Technology (Video walls), Barco, Zvezda Co. (Car transport), Digital Solutions (LED panels), plants from Ryazan, Voronezh et al.



*E. Novikova, Polymedia (right), V. Belyaev, SRC, A. Sadchikhin, AR Technology (left from Belyaev) are moderating the session*

3. June, 15th, 10.00 – 13.00: Round-table conference **"Displaying technology for industrial, embedded and onboard use"**



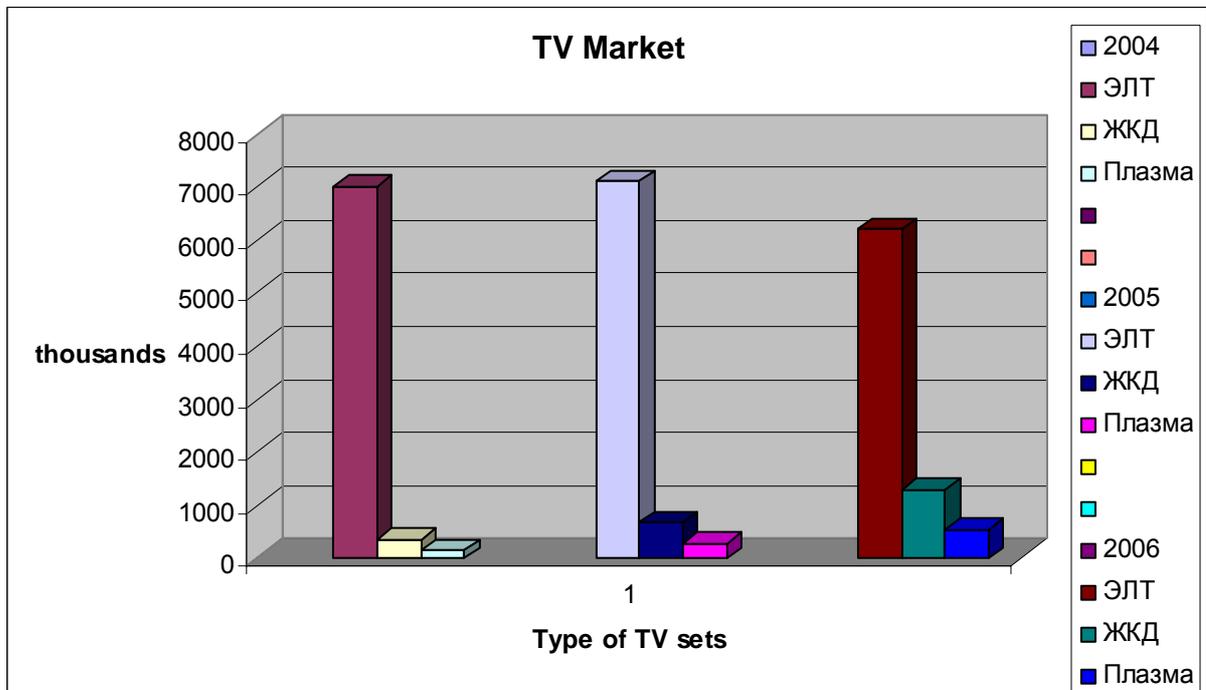
*I. Kompanets moderates the session*

#### Agenda

1. A.N. Pon'kin, Ministry of Industry and Energetics of Russian Federation, "On Russian program Otobrazheniye-XXI (Display-XXI)"
2. N.D. Zhukov, RDI Volga, Saratov, "New VFD including cathode luminescent devices and new LCD and problems of production"
3. V.N. Ulyasyuk, RDI Platan, Fryazino, "Active matrix LCD video modules with increased temperature range of operation"
4. A.N. Ivlyushkin, Plasma Co., Ryazan, "Plasma video modules for industrial and on-board applications"
5. MicroMax Co., "New models of industrial and on-board LCD monitors"

6. Design Bureau Display, Vitebsk, Byelorussia, "New achievements in design and production of on-board displays"
  7. B.Y. Gorelik, MKS, "On-board indicators"
  8. S.D. Tikhonov, IZOVAC, Byelorussia, "Display glasses"
  9. NPK Nikol, "LCD heating at low temperature"
  10. A.M. Berezovik, Microvideosystems, Byelorussia, "LED for LCD backlighting"
  11. V.Y. Litnovskii, EMZ Zvezda, "Information displaying in on-board control system of passenger automobile transport"
  12. B.G. Mayorov, NPP Rubin, Penza, Graphic adapter GA-90R for S-bus of computing complex Elbrus"
  13. E.P. Pozhidaev, Lebedev Physical Institute of RAS, "LCD with memory at switched-off supply"
4. June, 15th, 15.00 – 17.00: Round-table conference **"Russian market of display components"**

V. Belyaev presentation. Figure of Russian markets of the TV sets in 2004, 2005 and 2006 is below. It includes CRT, LCD and PDP TV sets.



5. June, 16th, 10.00 – 12.00: Seminar **"Prospects of new display technologies in Russia and CIS"**
- A.N. Pon'kin, Ministry of Industry and Energetics of Russian Federation, A.I. Voitenkov, General Director of Design Bureau Display, Vitebsk, Byelorussia, and B.N. Levonovich, Coordinator of Program Union TV Set presented a Program of Union State Russia and Byelorussia "VideoModule" for 2007-2010.
6. June, 16th, 12.00 – 14.00: Seminar **"Integrated information systems"**

## **Exhibition hall, June 14-16**

More 60 Exhibitors were represented in total. Below is the list of selected exhibitors, based on its' applicability to DTL projects.

### A. RDI Volga, Saratov, [www.rdi-volga.ru](http://www.rdi-volga.ru)

Main profile: LVD, VFD including color modules, FED, OLED, electrochromes.



*In the center Prof. V. Kuklev, coordinator of Russian governmental program OTOBRAZHENIYE-XXI (Display-XXI). Right – Dr. N. Zhukov, General Director of RDI Volga. Left – Dr. S. Studentsov, Head of Lab. His recent development – STN fast mode.*

### B. Design Bureau Display, Vitebsk, Byelorussia. [www.display.vitebsk.by](http://www.display.vitebsk.by)

Profile:

1. Development and production of video monitors on cathode-ray tubes, liquid crystal and plasma panels.
2. Development and production of panel and portable PCs.
3. Development and production of displays on liquid crystal panels for aviation multipurpose indicators.
4. Development and production of accompanying products and non-standard instrumentation for work with the manufactured articles.



*Chief Engineer of Design Bureau Display*



*Alexander Voitenkov, General Director*

C. NPO Mechatron LT, [www.mechatron.ru](http://www.mechatron.ru)

Profile: lasers on metal vapors and relating devices. A few kinds of projectors have been demonstrated.



*M. Levtonov, demonstrating a laser array*

D. AR Technology Co., tel/fax: +7(495)7271684. Director Dr. Sc. A. Sadchikhin

Profile – videowalls on the base of DLP- and LCD-chips. Thin design (47 cm) and large size of the modules (50”, 67”, 120”).



*Small gap (~0.1 mm) technology for tiled screen of AR Technology*

5. Integral Corp., Minsk, Byelorussia, [www.integral.by](http://www.integral.by)

Profile: Integrated Circuits, Displays, Semiconductor devices, Package Outlines, Services

Distributors opinion – best small/middle size LCD in CIS.

6. IZOVAC, Minsk, Byelorussia, [www.izovac.com](http://www.izovac.com)

Profile: coatings for displays (antirelection, heating, EMI protection, combined).

Following fields of application:

- Imaging Devices Manufacturing
- Optics
- Optical Electronics
- Telecommunications

- Fiber Optic Networks

For example:

**MC-540 cleaning system for OLED masks:**

ORTUS E-beam coaters

PlasmaScan 500

IZOMOD 545

IZOMOD 500 PM

Spectrophotometer SP 1024 USB

Assemblies

7. INCOTEX" Holding Company, [www.incotex.com](http://www.incotex.com)

A group of companies, focused on development, production and servicing of various electronic products. Holding history started from establishment of “Incotex Ltd.” in 1992 for development and production of electronic cash registers (ECR) under brand name “MERCURY”.

Product categories:

Big Size Plasma Tile Screens

LED screens

Printers & Printer Mechanisms

Digital Audio Devices



*Full color plasma module screens*

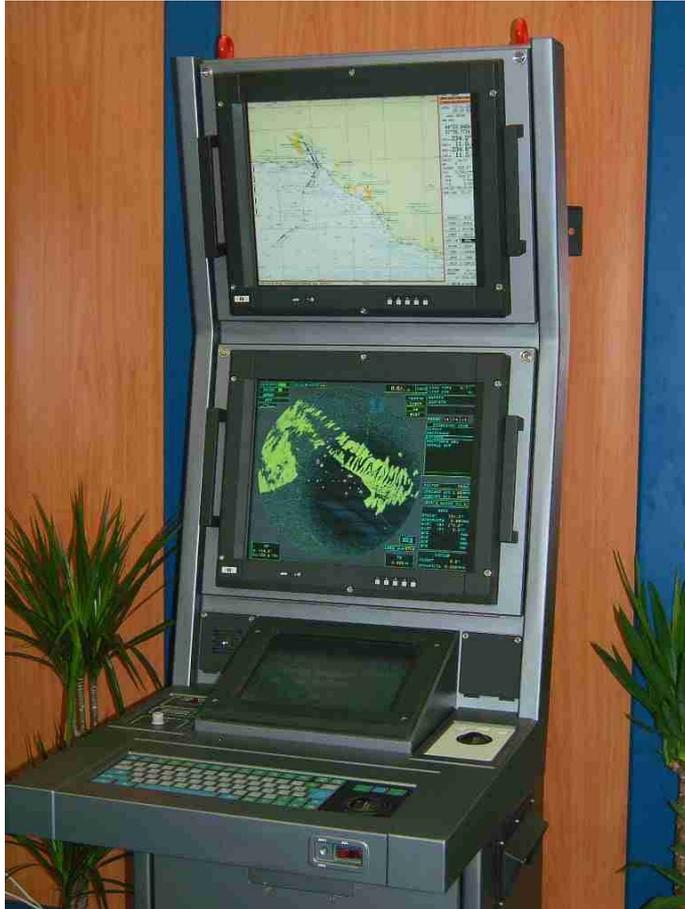


*Monochrome plasma display panels of DPI series*



*Full-color LED module screens*

8. AVRO-MKS Co., S-Petersburg, [www.avromcs.ru](http://www.avromcs.ru)  
Profile: LCD monitors for special applications



*Ship borne work station with LCD monitors*

9. Araneus Ltd., Yoshkar-Ola, Mari El, Russia, [www.araneus.ru](http://www.araneus.ru)

Profile: mobile and fixed video boards.



*Mobile video screen ACM 041.48. See also a picture in page 3.*

10. NPO "Technika-Service", Moscow, [www.ts.ru](http://www.ts.ru)

Profile: Protected notebooks and computers

- a) Shocks to 120 g
- b) Vibroizolation
- c) Double sealing-in
- d) Protection from dust and moisture

- e) Salt smog
- f) RF EMI
- g) Shock stable protective glass for LCD



*Notebook for industrial application*

11. Visual Technologies, Moscow, [www.trivisio.com](http://www.trivisio.com)

Profile: 3D tools and displays

12. MicroMax Computer Intelligence, Inc., [www.micromax.ru](http://www.micromax.ru)

Profile: protected and industrial LCD and CRT monitors



*Protected LCD monitor*

13. Forma Rent, Moscow, [www.formarent.ru](http://www.formarent.ru)

Profile: any kinds of displays



*Visio screen*

13. MELT, Moscow, [www.melt.com.ru](http://www.melt.com.ru)

Profile: manufacturing small/middle LCD

14. NPO Gorizont, Rostov-na-Donu, [www.gorizont.rostov.ru](http://www.gorizont.rostov.ru)

Profile: Liquid crystal video monitors intended for a wide range of the display devices used in the following areas:

- Sea, river and ship navigational radars;
- Ship traffic Control systems;
- Electronic cartographical navigation information systems;
- Systems of radar observation of water surface conditions of coastal water areas;
- Radar stations of the airfield observation;
- Control systems and the control of ship, aviation, railway and automobile basing

15. Consulting & Engineering Center of Microelectronics, Moscow, [www.cec-mc.ru](http://www.cec-mc.ru)

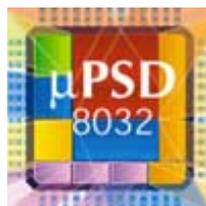
Profiles:



**LCD**



**LED & OLED**



**Systems-on-Crystal**  
**PSoC, PSD, μPSD**



**Optoelectronic devices**



*Graphic and Symbol Indicators of CEC-MC*

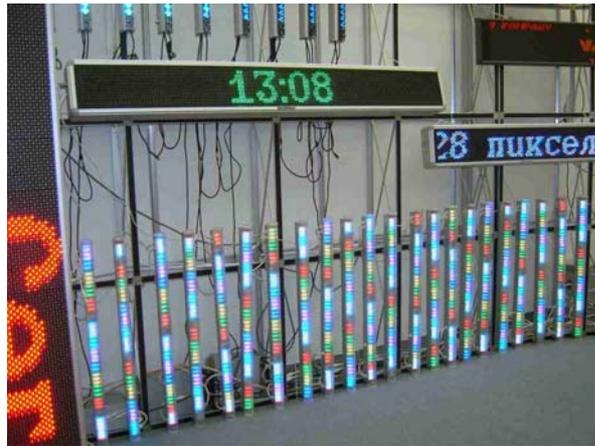
16. Vidikon Co., Moscow, [www.vidikon-group.ru](http://www.vidikon-group.ru)



*LED modules of Vidikon Co., Moscow, [www.vidikon-group.ru](http://www.vidikon-group.ru)*

17. ATV Outdoor Systems, Moscow, [www.aatv.ru](http://www.aatv.ru)

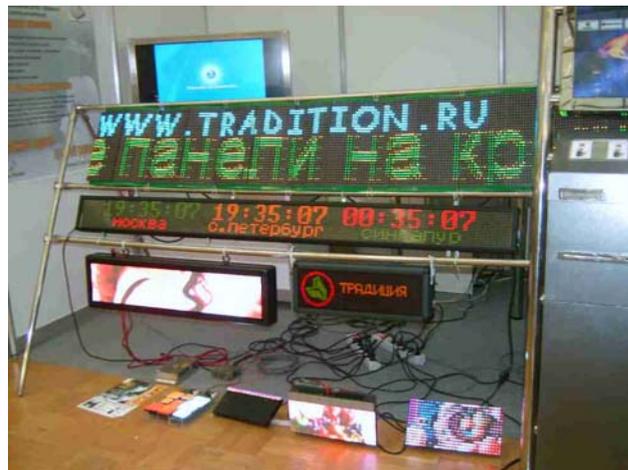
“ATV Outdoor Systems” is the leading Russian manufacturer of LED screens, displays, LED signs, LED scoreboards for stadiums, outdoor advertising and LED displays for concert shows, airports and terminals.



*Modules of ATV Outdoor Systems*

18. NPF Traditsiya (Tradition), Moscow, [www.tradition.ru](http://www.tradition.ru)

A group of ICT companies sharing the vision of "Innovation as an existence and development paradigm".



19. Rubin Plant, Penza



*LED modules of Rubin Plant, Penza*

20. D'Light Co., Volgograd, [www.dlight-ru.com](http://www.dlight-ru.com)

Flat and cylinder LED screens



*Cylinder LED screens of D'Light Co.*



*Car display*

### **Magazines (Russia)**

1. Components & Technologies
2. Sovremennaya Elektronika (Contemporary Electronics)
3. Elektronika: NTB (Electronics: Science, technology, Business)
4. Transport Electronics and Electric Equipment
5. Repair & Service
6. Schemotechnika
7. World of Computer Automation
8. Instrument Engineering & Automation Tools
9. Devices & Systems. Control, Management, Diagnosis
10. Industrial Control Systems
11. Radio
12. Radioamateur