Portable Digital Devices

Essential sourcing intelligence for buyers

China manufacturer profiles
Detailed profiles of 26 verified suppliers and contact details of an additional 31 exporters

Product & price trends
Prices and specifications of 86 top-selling export products

Supply centers & market trends
Coverage of leading and emerging supply centers, plus insight into capacity, output and R&D

March 2009  US$495

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PORTABLE DIGITAL DEVICES
Supplier capability in China

EXECUTIVE SUMMARY
China suppliers of portable digital devices are optimistic that strong demand for mobile entertainment and communication products will sustain the line despite the economic slowdown. In anticipation of weak sales, however, many are projecting moderate growth, especially in the US, which is a key market for most makers.

Suppliers are developing high-value products with expanded functionality to stimulate demand and penetrate new markets. As the convergence trend yields more devices with similar features and functions, many companies are strengthening core competency in their main product lines to differentiate themselves. Makers of digital voice recorders, for instance, focus on comparative advantage in recording and playback technologies to position products against MP3 players, portable media players or PMPs and even digital cameras with recorders.

In the video segment, the worldwide switch to digital broadcasting is expected to spur demand for digital handheld TVs and DVB receivers. Continued reductions in LCD panel cost will drive portable DVD player production. At the same time, makers are preparing for a rise in production outlay because of high licensing fees. Many are negotiating for lower charges and strengthening core R&D capability to develop key technologies.

The following are some of the key trends we see in China’s portable digital device industry:

• Makers across the different product segments are planning to reduce prices to increase demand and sales. Some suppliers of digital photo frames, especially small companies, are reducing quotes almost to cost levels.
• Continued decline in the cost of key components such as NAND flash memory and LCD panels will help reduce production outlay and price. Suppliers of digital voice recorders project up to a 10 percent price slide in coming months due mainly to cost reduction for NAND flash memory. Quotes for digital photo frames are projected to dip by 5 to 10 percent.
• Product differentiation remains a top priority, especially in highly competitive lines such as PMPs. Trends for converged, multifunction devices are flooding the market with new releases featuring the same designs and functions, thereby exerting pressure on suppliers to develop models that stand out.
• Increased focus on high-value products will fuel the development of portable digital devices with multiple functions. Upcoming models will have touchscreens, mobile TV, GPS, Bluetooth and Wi-Fi.
• Suppliers project that sales growth will be driven by rising demand in new markets in the Middle East, the Asia-Pacific region and Africa.

This report covers portable video products, recording devices, media players and digital photo frames. Portable video devices include handheld TVs, DVD players and DVB-T receivers. Media players encompass MP3/MP4 products and PMPs. Portable recording devices consist of digital voice recorders and video cameras.

The supplier survey was conducted on manufacturers and traders of these products. The Industry Overview section discusses developments in China’s supply market and suppliers’ strategies to survive the global financial crunch. Trends in the different product categories are also discussed in the product modules.

The majority of suppliers are based in Guangdong province, mainly in Shenzhen, Dongguan, Guangzhou, Huizhou, Zhongshan and Zuhuai. The other key production centers are the provinces of Fujian, Jiangsu, Sichuan and Zhejiang, and the cities of Beijing and Shanghai.

In this report
• 26 in-depth company profiles
• 31 additional suppliers
• 86 top-selling export products
• Supplier demographics
• Supplier survey
• Industry statistics & charts

METHODOLOGY
To produce this report, Global Sources surveyed a wide range of suppliers. Rather than focus simply on high-profile makers, we compiled a representative sample of large, midsize and emerging manufacturers. All profiled companies are export-oriented professional suppliers that may or may not be clients of Global Sources.

The selection of suppliers is designed to reflect the composition of the industry in China in terms of geographic spread, business type and company ownership.

For in-depth company profiles, our research teams interviewed senior executives and export managers who discussed their recent performance and provided price, R&D, production and export forecasts for the next 12 months. The interviews were done in person, by phone or e-mail.

In each case, companies were required to answer specific questions designed to verify their manufacturing and export credentials, including their production and export statistics, and a breakdown of exports by product type and market. Our production checklist details the product-specific manufacturing capability of each supplier.

All profiled suppliers participated in a survey designed to provide insight into product and price trends, and challenges facing the industry in the next 12 months. All survey questions are single choice. Results were calculated based on the actual number of valid responses to each question.
PORTABLE DIGITAL DEVICES

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4th Floor, Century Yard, Cricket Square, Elgin Avenue, P.O. Box 32322 SMB, George Town, Grand Cayman, Cayman Islands

C/o 22/F Vita Tower, 29 Wong Chuk Hang Road, Aberdeen, Hong Kong

Strong demand for mobile entertainment and communications will continue to fuel China's supply market for portable digital devices. Makers are optimistic high-value products with expanded functionality will stimulate demand, especially in less-developed markets where penetration remains low.

Suppliers, however, are projecting moderate growth this year in light of the global financial crisis. Some expect a 5 to 20 percent drop in output and export volumes in response to slowing sales, especially in the US, which is a key export market for many companies.

In addition to the weak economy, market maturity and increased competition from handheld, converged multimedia products will also contribute to a slowdown in many segments. Estimates from In-Stat indicate that growth in the portable media player or PMP market dipped below 10 percent in 2008, the first time since market inception. In-Stat projects the line will take a downward trend in the next five years, with global shipments at 245 million units by 2012.

To offset slumping sales in North America, makers are boosting shipments to new markets in the Middle East, the Asia-Pacific region, Eastern Europe, Africa, and Central and South America. Many suppliers are sustaining efforts to stimulate demand through product development and repositioning.

In the video segment, companies expect the switch to digital broadcasting will spur demand for digital handheld TVs and DVB receivers. Suppliers of portable DVD players are hoping the continued reduction in LCD panel costs will boost production.

To survive tight competition resulting from companies releasing devices with similar features, applications and form factors, suppliers leverage core competency in main product lines.

Makers of digital voice recorders, for instance, focus on comparative advantage in recording and playback technologies to position their products against MP3 players, PMPs and even digital cameras with recorders.

Suppliers of handheld TVs, portable DVD players and DVB-T receivers prepare for a rise in production outlay despite declines in component cost. This is largely because of high licensing fees.

As the DVB-T consortium European MPEC-2 Alliance steps up efforts to guard against infringements, suppliers of portable DBV-T receivers are laying out strategies to address the issue and reduce export difficulties. These approaches include negotiating with the European MPEC-2 Alliance. Makers are also planning to establish a patent pool that will include third-party IPR specialists who will conduct research and coordinate efforts to access core areas of the technology. Another course of action is to raise export quotes to factor in IPR costs.

Makers of portable DVD players need to pay 6C, 1C, 4C Dolby and MPEG-LA fees on proprietary content and technology. Although 6C has lowered IPR dues, overall charges still amount to a considerable $20 per unit. The Blu-ray license adds 20 percent. Industry organizations, including China Automotive Industry Association, are lobbying for a reduction in that fee. Suppliers are also preparing for the impact of Blu-ray, particularly on early models of portable DVD players that do not support the technology and, therefore, risk facing competition from Blu-ray models.

### Major customers

<table>
<thead>
<tr>
<th>Company</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>10moons</td>
<td>Lenovo (China)</td>
</tr>
<tr>
<td>Canfine</td>
<td>Auchan (France); Tesco (UK); Wal-Mart (US)</td>
</tr>
<tr>
<td>Evoc</td>
<td>GE, Emerson (US); Philips (Netherlands); Siemens (Germany)</td>
</tr>
<tr>
<td>Fujiyama</td>
<td>Hyundai (South Korea)</td>
</tr>
<tr>
<td>Giftmax</td>
<td>Disney, LDLC (France); Subaru (Japan)</td>
</tr>
<tr>
<td>HTD</td>
<td>C&amp;D, Buysasonic LLC (US)</td>
</tr>
<tr>
<td>Kingstong</td>
<td>Carrefour (France)</td>
</tr>
<tr>
<td>Maxevis</td>
<td>Telefunken (Germany); Orion (South Korea); Protek (US)</td>
</tr>
<tr>
<td>One Audio</td>
<td>Cocola, IBM, Philips (US); Siemens (Germany)</td>
</tr>
<tr>
<td>Peakit</td>
<td>Cisco (US); TDK (Japan)</td>
</tr>
<tr>
<td>Power-core</td>
<td>Hisense (Europe); TG International (Canada); Thanko (Japan)</td>
</tr>
<tr>
<td>Shenzhen Ider</td>
<td>HP (US); ArticFlames, Image (Spain); China Mobile (China)</td>
</tr>
<tr>
<td>Shenzhen Maxcon</td>
<td>Wal-Mart (US)</td>
</tr>
<tr>
<td>Shenzhen Newland</td>
<td>Wal-Mart, RCA (US); Carrefour (France)</td>
</tr>
</tbody>
</table>

Data: All surveyed suppliers

### Supplier summary

<table>
<thead>
<tr>
<th>Suppliers surveyed</th>
<th>Export sales</th>
<th>Export ratio</th>
<th>OEM business</th>
<th>Capacity utilized</th>
<th>Annual R&amp;D spending</th>
<th>Full-time employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>$544.8mn</td>
<td>86%</td>
<td>73%</td>
<td>65%</td>
<td>$50.0mn</td>
<td>15,297</td>
</tr>
</tbody>
</table>

Data: All surveyed suppliers

www.ChinaSourcingReports.com
DaiDaiXing Electronics Technology Co. Ltd

Mainland China-owned DaiDaiXing offers digital still and video cameras, digital photo frames and portable media players.

It uses chips sourced from the US and Taiwan, flash memory chips from the US, Japan and South Korea, LCD panels from the US, and decoding ICs from Taiwan.

About 50,000 portable digital devices are produced each month in DaiDaiXing’s factory in Guangdong. Its facility is equipped with Sony SMT lines, 14 plastic injection machines, an automatic fuel injection line, six automatic aluminum wire welding, a high-speed CNC carving, and various other molding machines and instrumentations. The company adopts GBT2828 standard for QC.

DaiDaiXing exports 80 percent or about $24 million worth of portable digital devices each year. It will cut its capital expenditure over the next 12 months.

Prices are expected to decrease less than 5 percent this year, and export sales to dip along with it. Currently, overseas shipments for this product line stand at $24 million.

### Company facts

<table>
<thead>
<tr>
<th>Year established</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business type</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>Company ownership</td>
<td>Mainland China-owned</td>
</tr>
<tr>
<td>Head office location</td>
<td>Guangzhou (Guangdong)</td>
</tr>
<tr>
<td>Number of factories</td>
<td>1</td>
</tr>
<tr>
<td>Factory location(s)</td>
<td>Guangzhou (Guangdong)</td>
</tr>
<tr>
<td>Total factory area</td>
<td>10,000 sqm</td>
</tr>
<tr>
<td>No. of full-time employees</td>
<td>1,000</td>
</tr>
<tr>
<td>No. of R&amp;D/design staff</td>
<td>120</td>
</tr>
<tr>
<td>No. of QC staff</td>
<td>70</td>
</tr>
<tr>
<td>Annual sales (all products)</td>
<td>$30.0 mn</td>
</tr>
<tr>
<td>Annual R&amp;D spending</td>
<td>$3.0 mn</td>
</tr>
<tr>
<td>ISO certification</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Sales & output: Portable digital devices

| Annual sales | $30.0 mn |
| Share of total sales | 100% |
| Annual export sales | $24.0 mn |
| Total monthly capacity | 100,000 units |
| Average monthly output | 50,000 units |
| Capacity utilized | 50% |
| Average monthly exports | 40,000 units |
| Export ratio | 80% |
| OEM % of exports | 50% |
| ODM % of exports | 20% |
| OBM % of exports | 30% |

### Profile

<table>
<thead>
<tr>
<th>Production units/mth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>Exports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales $mn/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sales</td>
</tr>
<tr>
<td>Sales (portable digital devices)</td>
</tr>
<tr>
<td>Exports (portable digital devices)</td>
</tr>
</tbody>
</table>

### Contact details

Business contact
PENG Tina
Phone (86-20) 3473-7286
Fax (86-20) 3473-7959
E-mail sales@timetopcn.com
timetop@globalsources.com
URL www.timetopcn.com
www.globalsources.com/timetop.co
Address Shakeng The Second Industrial Zone, Shawnan, Panyu, Guangzhou, Guangdong, China
Portable Digital Devices

**SUPPLIER PROFILES**

### Popular export models

<table>
<thead>
<tr>
<th>Digital video camera</th>
<th>Model</th>
<th>Minimum order</th>
<th>Packaging type</th>
<th>Delivery time</th>
<th>Indicated price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV066</td>
<td>DV066</td>
<td>1,000 units</td>
<td>Colored box</td>
<td>35 days</td>
<td></td>
</tr>
<tr>
<td>DV819ZH</td>
<td>DV819ZH</td>
<td>1,000 units</td>
<td>Colored box</td>
<td>35 days</td>
<td></td>
</tr>
<tr>
<td>DV588</td>
<td>DV588</td>
<td>1,000 units</td>
<td>Colored box</td>
<td>35 days</td>
<td></td>
</tr>
</tbody>
</table>

- **Description:** 1.5in TFT LCD, 280x220 pixels; ASF, AVI; USB 1.1, TV output, digital camera; 96.5x60x32mm, 72g; USB cable, TV cable
- **Description:** 3in LTPS LCD, 960x240 pixels, 16:9 aspect ratio; 32MB memory; ASF, AVI, MP3; USB 2.0, TV output; 132x66x70mm, 473g; USB cable, TV cable, HDMI cable
- **Description:** 2.5in LTPS LCD, 960x240 pixels; 32MB memory; ASF, AVI, MP3, WAV; e-book reader, voice recorder; USB 2.0, TV output; 113x56x240mm, 130g; USB cable, TV cable, lithium battery with 3hr operating life

---

**Capability**

<table>
<thead>
<tr>
<th>Production checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetic design in-house</td>
</tr>
<tr>
<td>Mold making</td>
</tr>
<tr>
<td>PCB making/design/subassembly</td>
</tr>
<tr>
<td>SMT</td>
</tr>
<tr>
<td>Plastic injection</td>
</tr>
<tr>
<td>Software design</td>
</tr>
<tr>
<td>Silkscreen/offset printing</td>
</tr>
<tr>
<td>Final assembly</td>
</tr>
<tr>
<td>QC/QA testing</td>
</tr>
</tbody>
</table>

### Exports by product

- **Digital cameras:** 20%
- **Digital video cameras:** 60%
- **Digital photo frames:** 5%
- **Portable media players:** 15%

### Exports by market

- **North America:** 10%
- **European Union:** 50%
- **Europe (non-EU):** 8%
- **Asia-Pacific:** 30%
- **Middle East:** 2%
- **Other:** —

### Outlook

- **Export prices**
  - Decrease
- **Export price decrease**
  - Less than 5%
- **Export sales**
  - Decrease
- **Target market**
  - European Union
- **Capital expenditure**
  - Reduce expenditure
- **Major challenge**
  - Labor cost
- **Export capability**
  - Improve operating efficiency
- **R&D focus**
  - Integrate wireless connectivity

---

Information not disclosed
**PRODUCT GALLERY**

**Digital photo frames**

**Best Wisdom**  
(profile page 40)  
Model: BW-F3501  
Minimum order: 50 units  
Packaging type: Colored box  
Delivery time: 3 days  
Indicated price:  

**Description:** 3.5in display, 4:3 aspect ratio; 64MB to 4GB NAND flash memory; JPEG, built-in alarm clock, USB 2.0; 122x92x16mm, 350g; adapter

**Best Wisdom**  
(profile page 40)  
Model: BW-F3504  
Minimum order: 300 units  
Packaging type: Colored box  
Delivery time: 7 days  
Indicated price:  

**Description:** 3.5in display, 4:3 aspect ratio; 64MB to 4GB NAND flash memory; MP3, WMA, Ogg Vorbis, WAV, AVI; USB 2.0, built-in alarm clock; 1yr battery life; 122x92x16mm, 400g; USB adapter, cable, plug, remote control, earphones

**Canfine**  
(profile page 42)  
Model: CF080130B  
Minimum order: 5,000 units  
Packaging type: Plastic bag  
Delivery time: 60 days  
Indicated price:  

**Description:** 1.44 to 1.8in TFT/CSTn, 4:3 aspect ratio; Samsung or Hynix 1 to 8GB flash memory; JPEG, BMP; USB 2.0; 100hr battery life; 400g

**Evoc**  
(profile page 46)  
Model: EPB-08-06  
Minimum order: 1,000 units  
Packaging type: Gift box  
Delivery time: 10 days  
Indicated price: $85.50  

**Description:** 8in TFT LCD, 800x600 pixels, 16:9 aspect ratio; 128MB to 1GB memory; MP3, WMA, MPEG-1/2/4, AVI; USB 2.0, Wi-Fi, calendar, alarm clock; 203x125x65mm, 1.35kg; IR remote control, AC adapter, CD, user manual

**Evoc**  
(profile page 46)  
Model: EPA-M15-03  
Minimum order: 1,000 units  
Packaging type: Gift box  
Delivery time: 10 days  
Indicated price: $9.00  

**Description:** 1.5in CSTN, 128x128 pixels, 65,000 colors; 1MB memory; JPEG, BMP, GIF, TIF; USB 1.1, clock; Li-ion battery, 4 to 5hr battery life; 125x103x45mm, 115g; USB cable, CD, user manual; FCC, CE, RoHS

**Evoc**  
(profile page 46)  
Model: EPA-07-19  
Minimum order: 1,000 units  
Packaging type: Gift box  
Delivery time: 10 days  
Indicated price: $37.50  

**Description:** 7in TFT LCD, 480x234 pixels, 16:9 aspect ratio; 128MB to 1GB memory; MP3, WMA, MPEG-1/2/4, AVI; USB 2.0, touch menu, calendar, alarm clock; 187x138x10mm, 750g; IR remote control, AC adapter, CD, user manual

* Information not disclosed
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