

INTERNATIONAL DIRECTORY OF IC PACKAGING FOUNDRIES

LEGEND

- Customers by Region
A=Asia (except Japan); B=Europe; C=Japan; D=North America; E=Rest of World
- Package Materials Offered
A=Ceramic; B=Plastic; C=Metal; D=Other
- Dedicated Lines
A=None; B=1-2; C=3-5; D=5+; E=Other or declined to state
- Quality Audits
A=ISO-9001; B=ISO-9002; C=ISO-14000; D=SAC Level 1; E=QS9000; F=Other (specify)
- On-Site Test
A=Opens/Shorts; B=RF Test; C=Memory Test; D=Logic Test; E=Analog/Mixed-Signal Test; F=Other (specify)

| Company Address Founded Phone Fax Chairman ★ President CEO ☆ COO ◇ Other Title | Number of Employees | Stock Symbol (Technology) High ↑ Low ↓ Began Trading | 2001 Sales | 2002 Sales | Customers by Region | Package Materials | Maximum Number of Leads | Dedicated Lines | Manufacturing Area in Meters ² ▲ % Dependent to Assembly/Test | On-Site Test Equipment | Quality Audits | Most Popular Packages/Month | Fine Leak? Gross Leak? | CSPs Offered? | Bumping? Flip Chip? | WLP? Internal WLP Access? | Web Site |
|--|---------------------|---|--------------------|--------------------|----------------------|-------------------|-------------------------|-----------------|---|------------------------|--------------------------------|-----------------------------|------------------------|---------------|---------------------|---------------------------|--|
| Advanced Interconnect Technologies 6800 Koll Center Parkway, Ste. 220 Pleasanton, CA 94566 1991 925.426.3100 925.426.2323 Ralph Duceour See Haw Tan (CFO) | 2,001-5,000 | N/A | Not Available | Not Available | Not Available | B, C | 900 PBGA | E | 58,000 ▲ 80/20 | A, B, C, D, E | A, B, C, E | PDP (600M), SOIC (600M) | No No | No | No | No | aitna.com Chris Stai, Marketing Mgr., cstai@aitna.com Austin, TX; Batam, Indonesia; Manteca, CA; Sunnyvale, CA In 1999, Advanced Microtronics Technology (Astra Microtronics) and Hana Technologies (previously Swire Technologies, Hong Kong), merged to create AIT. In April 2003, the company announced the closure of the Hong Kong facility. |
| Amkor Technology Inc. 1345 Enterprise Dr. West Chester, PA 19380 1968 610.431.9600 610.431.5881 James J. Kim John N. Boruch Kenneth Joyce (CFO) | 5,000+ | AMKR (NASDAQ) 5.1.98 \$1 (6/00) \$1.20 (9/02) | \$1.52 Billion | \$1.64 Billion | Not Available | A, B | 2,401 SuperFC | D | 380,902 ▲ N/A | A, B, C, D, E | A, B, C, D, E | MLF (60M), SOIC (80M) | Yes Yes | Yes | Yes | No | amkor.com Jeffrey Luth, VP-Corp. Comm. jluth@amkor.com Operations HQ: 1900 South Price Rd., Chandler, AZ 85248 480.821.5000 480.821.8276 China 1, Japan 1, Korea 4, Philippines 4, Taiwan 1 |
| ASAT Holdings Ltd. 138 Texaco Rd. Tsuen Wan, NT, Hong Kong 1988 +852.2408.7811 +852.2407.4056 Leonard Perham Harry R. Rozakis Charles F.L. Ward (GM, ASAT Inc.) | 1,001-2,000 | ASTT (NASDAQ) 7.1.00 \$12 (7/00) \$0.30 (2/03) | Not Available | Not Available | A=5, B=15, D=80 | A, B, C | 1,000 BGA | E | 150,000 ▲ 80/20 | B, C, D, E | A, B, C, D, E | LPCC BGA (Not Supplied) | N/A N/A | N/A | Yes | Yes | asat.com Connie Bordanaro, Marketing Manager connie_bordanaro@asat.com Operations HQ: 8 ASAT Inc., 46335 Landing Parkway Fremont, CA 94538 510.249.1222 Hong Kong |
| ASE Inc. (Advanced Semiconductor Engineering Inc.) Room 1901, TWTC International Trade Building, 333 Keelung Rd., Section 1, Taipei, Taiwan 1984 +886.2.8780.5489 +886.2.2757.6121 Jason Chang, Richard Chang Joseph Tung (CFO) | 5,000+ | ASX (NYSE) 9.26.00 \$3.19 (1/03) \$2.50 (2/03) | \$1.11 Billion | \$1.32 Billion | A=38, B=7, C=1, D=54 | A, B, C | 1,681 FCBGA | E | N/A ▲ N/A | B, C, D, E | B, C, D, E | K&S UltracSP | N/A N/A | Yes | Yes | Yes | aseglobal.com Jennifer Yuen, Mktg. Dir., marketing@aseus.com Operations HQ: 8 ASE (U.S.) Inc., 3590 Peterson Way Santa Clara, CA 95054 408.986.6500 408.565.0289 Fremont, CA; Hong Kong; Paju, Korea; Penang, Malaysia; Singapore; Taiwan |
| Aspen Technologies 5050-C List Dr. Colorado Springs, CO 80919 1989 719.592.9100 719.592.9126 | <100 | N/A | Not Available | Not Available | B=6, D=94 | A, B, C | N/A | C | 10,000 ▲ 100/0 | A | A | N/A | Yes Yes | N/A | Yes | N/A | aspentechologies.net Jack D. Harrison, VP-Marketing info@aspentechologies.net Colorado Springs, CO |
| Carsem Jalan Lapangan Terbang P.O. Box 204 30720 Ipoh, Perak, Malaysia 1972 +60.5.312.3333 +60.5.312.5333 Kwek Leng San David Comley, Group Managing Director | 5,000+ | MPL (MYMEX/KU) Kuala Lumpur 1984 \$15 (2/00) \$2.60 (4/01) | \$185 Million (CY) | \$185 Million (CY) | A=8, B=30, C=2, D=60 | A (SIP only), B | 650 SSBGA (0.8mm pitch) | C | 72,000 ▲ 90/10 | A, B, D, E | A, B, C, D, E and ISO/TS 16949 | SOT23 (150M) | N/A N/A | No | No | No | carsem.com Rick Flowers VP, Sales-N.A., rflowers@carsem.com 8 CARSEM, 269 Mt. Hermon Rd., Ste. 104 Scotts Valley, CA 95066 831.438.6861 831.438.6863 Paul Smith, Mktg. Dir., psmith@carsem.com 8 CARSEM Boston (Mass.) 508.699.4720 508.699.4512 CARSEM Europe, Swindon, England +44.1793.853888 +44.1793.855388 Ipoh, Malaysia 2; China (Carsem-Suzhou, under construction) Carter Semiconductor until its acquisition by Hong Leong Group, Malaysia, in 1994. |

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| See detailed descriptions and legend on page 51 | | | | | | | | | | | | | | | |
|---|-------------|--|-----------------------------------|-----------------------------------|--------------------------|-----------------------|----------------------|--------------------------|-----------------------------|---------------|--|---|---|--|--|
| ChipMOS Technologies (Bermuda) Ltd. No. 1 R&D Road 1, Science-Based Industrial Park, Hsinchu, Taiwan 1986 ☎ +886.3.577.0055 ☎ +886.3.566.8989 ⚡ Hung-Chiu Hu ⚡ S.J. Cheng ⚡ S.K. Chen (CFO) | 2,001-5,000 | IMOS (MSPAD) ↓ \$5.50 (3.02) ↓ \$1.27 (12.02) | \$106 Million | Not Available | A=6, C=3, D=3, E=88 | B | 550 TCP | 84,600 ▲ 50/50 | B, C, E | A, C, D, E | TSOP (22M), Tape Carrier Pack (18M), µBGA (2.4M) | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | chipmos.com.tw * S.K. Lin, Special Assistant to the President s.k._lin@chipmos.com.tw 8 ChipMOS USA Inc. 1245 Tiros Way, Sunnyvale, CA 94086 ☎ 408.830.9401 ☎ 408.839.9143 🌐 Taiwan (Hsinchu, Kaohsiung, Tainan); China (Shanghai) |
| ChipPAC Inc. 47400 Kato Rd. Fremont, CA 94538 1997 ☎ 510.979.8208 ☎ 510.979.8009 ⚡ ⚡ ⚡ Dennis McKenna ⚡ Robert Krakauer (CFO) | 5,000+ | CHPC (MSPAD) ↓ \$19.50 (8.00) ↓ \$0.99 (10.02) | \$328.7 Million | \$363.7 Million | A=1, B=3, C=9, D=82, E=5 | B, C | 1728 FCBGA | 151,462 ▲ 80/20 | A, B, C, D, E and ISO-14001 | A, B, C, D, E | CSP (20M), SOIC (60M) | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Yes | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | chippac.com * Dr. Marcos Karnezos, CTO marcos.karnezos@chippac.com 🌐 China (Shanghai); Korea (Icheon); Malaysia (Kuala Lumpur) ⚡ Formerly Hyundai's Assembly & Test Division |
| Chip Supply Inc. 7725 N. Orange Blossom Trail Orlando, FL 32810 1978 ☎ 407.298.7100 ☎ 407.290.0164 ⚡ ⚡ Edward Perrott ⚡ Dale Pullis (CFO) | 100-500 | N/A | Not Available | Not Available | A=5, B=15, D=80 | A, B, C and laminates | Determined by design | 3,800 ▲ 65/35 | B | A, C, D, E | BGA (N/A) | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Avail. Q3 2003 | chipsupply.com * Tony Hamby, Director of Mktg. and Sales thamby@chipsupply.com 🌐 Orlando, FL |
| CORWIL Technology Corp. 2127 Ringwood Ave. San Jose, CA 95131 1990 ☎ 408.321.6404 ☎ 408.321.6407 ⚡ ⚡ Robert C. Corrao | 100-500 | N/A | Not Available | Not Available | A=5, C=2, D=88 | A, B and laminates | 3000 BGA | 3,000 ▲ 90/10 | B, QML listed | A, C, D, E | DIP (250K), BGA (150K) | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No <input type="checkbox"/> Yes | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | corwil.com * Robert Corrao, President robcorrao@corwil.com 🌐 San Jose, CA |
| Fastech Synergy Ltd. Light Industry and Science Park Cabuyao, Laguna, Philippines Not Supplied ☎ +632.698.3831 ☎ +632.698.3831 ⚡ ⚡ Saturnino G. Belen Jr. ⚡ John Robert Payne ⚡ Antonio N. Abaya Jr. (CFO) | 1,001-2,000 | Fastech (S&S Singapore) ↓ \$0.97 (2.00) ↓ \$0.065 (10.02) | \$23.51 Million | \$17.23 Million | A=30, B=30, D=30, E=10 | B, C | 28 PDIP | N/A ▲ N/A | A, E | A, E | TO-92 (12K/week), Modules (500K) | <input type="checkbox"/> No <input checked="" type="checkbox"/> No <input type="checkbox"/> No | <input type="checkbox"/> No <input type="checkbox"/> Yes | <input type="checkbox"/> No <input checked="" type="checkbox"/> No | fastech.com.ph * Erwin O. Manibog, Executive Director of Sales and Marketing eomanibog@fastech.com.ph 🌐 Laguna, Philippines |
| Fujitsu Marunouchi Building Tokyo, Japan 1935 ☎ +81.3.3216.3211 ⚡ ⚡ Tadashi Sekizawa ⚡ ⚡ Naoyuki Akikusa ⚡ Takashi Takaya (CFO) | 5,000+ | 6702 (Tokyo Stock Exchange) N/A N/A N/A N/A | See pr.fujitsu.com/en/annual/2002 | See pr.fujitsu.com/en/annual/2002 | A=10, B=10, C=40, D=40 | A, B, C, D | 3,500+ FCBGA | 4,000,000 ▲ 60/40 | A, B, C, E | A, B, C, D, E | N/A | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No <input type="checkbox"/> Yes | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes | fma.fujitsu.com/apt * Dennis Stephenson, Sr. Director—Business Development dstephenson@fma.fujitsu.com 8 Fujitsu Microelectronics America Inc. 1250 East Arques Ave., Sunnyvale, CA 94088 ☎ 408.737.5600 🌐 See fujitsu.com/worldwide |
| Hana Microelectronics Public Company Ltd. Bangkok 10210, Thailand 1978 ☎ +66.2551.1297 ☎ +66.2551.1299 ⚡ S.Y. Han ⚡ Winson Hui ⚡ Richard Han | 5,000+ | HANA (Bangkok) N/A N/A N/A | \$165 Million | \$192 Million | A=37, B=8, D=55 | B and hybrids | 100 QFP | 68,000 ▲ N/A | B, C, E | A, B, C, D, E | SC70 (60M) | <input type="checkbox"/> No <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> 3rd party <input type="checkbox"/> Yes | <input type="checkbox"/> No <input checked="" type="checkbox"/> No | hanaus.com * Bruce Stromstad, President, bruce@hanaus.com 8 Hana Microelectronics Inc. 1731 Technology Dr., Ste. 590 San Jose, CA 95110 ☎ 408.467.0911 🌐 China (Shanghai); Thailand (Ayutthaya, Bangkok, Lamphun); Twinsburg, OH |

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| See detailed descriptions and legend on page 51 | ↓ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | 8 * ☎ ✉ 🌐 📧 |
|--|-------------|--|-------|---------------|---------------|-----------------------|-----------------------------|-------------------|---|----------|-----------------------|----------------------------|---------------------|------------------------------|---|-----------------------------|-------------------------------|---------|---------|---------|---------|--|--|
| <p>Kyocera America (Division of Kyocera Corp.) 8611 Balboa Ave. San Diego, CA 92123 ☎ Not Supplied ☎ 858.576.2600 ☎ 858.569.9412 ★ Dr. Kazuo Inamori ★ Yasuo Nishiguchi ◆ Robert Whisler ◇ Nancy McCleary (CFO)</p> | 501-1,000 | ↕ N/A ↕ N/A ↕ N/A | ↕ N/A | Not Available | Not Available | Not Available | A and metal-glass laminates | 2,500 ceramic BGA | E | ↕ N/A | ↕ 32,330 (U.S. Plans) | ↕ 65/35 | A, C, OML compliant | N/A | Ceramic LGA, COFP, Organic LGA (150K); Ceramic PGA (150K) | F Yes G Yes | Kyocera Style Strap Array CSP | N/A Yes | N/A No | N/A No | N/A No | N/A No | <p>kyocera.com * Barbara Hamm, Marketing Communications Specialist kaicorp@kyocera.com 🌐 San Diego, CA; Beaverton, OR; Tijuana, Mexico; Japan (various plants)</p> |
| <p>Lingsen Precision Industries Ltd. 5-1 Nan 2nd Road, T.E.P.Z. Taichung, 427 Taiwan ☎ 1973 ☎ +886.4.2533.5120 ☎ +886.4.2533.0183 ★ Ko-Chien Yeh ◇ Larry Lai (CFO)</p> | 1,001-2,000 | ↕ N/A | ↕ N/A | \$66,951 | \$83,940 | A=45; B=5; C=20; D=30 | A, B | 208 AFP | C | ↕ 25,822 | ↕ 65/35 | B, C, E | A, C, D, E | PLCC (15M); SOT (40M) | F No G No | No | No No | No No | No No | No No | No No | <p>lingsen.com.tw * Jenny Wong, Sales Manager jennywong@lingsen.com.tw 🌐 Lingsen America Inc. 3140 De La Cruz Ave., Ste. 101 Santa Clara, CA 95054 ☎ 408.855.0594 🌐 Taiwan (Taichung, 6)</p> | |
| <p>Majelac Technologies LLC 905 Harrison St., Ste. 127 Allentown, PA 18103 ☎ Not Supplied ☎ 610.770.1060 ☎ 610.770.1043 ★ Marygrace Quinn ★ Michael Quinn</p> | <100 | ↕ N/A | ↕ N/A | Not Available | Not Available | B=10; D=90 | A, B, C, other | 1,752 FCBGA | B | ↕ 500 | ↕ 1000 | N/A | N/A | 8 SOIC (20K); 208 QFP (10K) | F No G No | No | Yes Yes | No Yes | No Yes | No Yes | No Yes | <p>majelac.com * Michael Quinn, President mfquinn@majelac.com 🌐 Allentown, PA</p> | |
| <p>Mitsui High-tec Inc. 10-1 Komine 2 Chome Yahatanishi-ku Kitakyushu-shi, 806-8588, Japan ☎ 1949 ☎ +81.93.614.1111 ☎ +81.93.614.1200 ★ Yoshiaki Mitsui</p> | 2,001-5,000 | ↕ 6966 (Tokyo 1st Section) ↕ N/A ↕ N/A | ↕ N/A | \$60 Million | \$47 Million | C=75; D=25 | B | 480 PBGA | D | ↕ 30,000 | ↕ 90/10 | A | D | 20 TSSOP (4M); 360 PBGA (1M) | F No G Yes | No | No Yes | No Yes | No Yes | No Yes | No Yes | <p>mitsuihightec.com * Ron Kampa, Regional Sales Manager rkampa@mitsuihightec.com 🌐 Mitsui High-tec (USA) Inc. 1500B E. Higgins Rd. Elk Grove, IL 60007 ☎ 847.593.1634 🌐 Japan (Kumamoto, Kitakyushu)</p> | |
| <p>Natel Engineering Co. Inc. 9340 Owensmouth Ave. Chatsworth, CA 91311 ☎ 1975 ☎ 818.734.6500 ☎ 818.734.6530 ★ Sudesh Arora ☆ Peter Guest</p> | 100-500 | ↕ N/A | ↕ N/A | Not Available | Not Available | D=97; E=3 | A, C | N/A | C | ↕ 10,870 | ↕ 60/40 | A, MIL-PRF-38534 (MIL-883) | A, B, D, E | FR4 board (30M) | F Yes G Yes | Natal BGA and chip stacking | Yes Yes | Yes Yes | Yes Yes | Yes Yes | Yes Yes | <p>nateleng.com * Willis Damkroger, Vice President of Sales willisd@nateleng.com 🌐 Chatsworth and Simi Valley, CA</p> | |
| <p>NS Electronics Bangkok 40/10 Sukumvit, Soi 105 Bangna, Bangkok 10260, Thailand ☎ 1993 ☎ +662.749.1680 ☎ +662.398.7157 ★ Thamnu Wanglee ★ Udom Udompanyavit ◇ Bonchai Jonjitaree (Finance Director)</p> | 2,001-5,000 | ↕ N/A | ↕ N/A | Not Available | Not Available | A=10; B=20; D=70 | B | 88 TOFN | A | ↕ 30,000 | ↕ 65/35 | B, C, D | B, C, D, E | 8 SOIC (40M) | F N/A G N/A | N/A | No Yes | No Yes | No Yes | No Yes | No Yes | <p>nseb.com * Jerry Kirby, Sales and Mktg. Director jkirby@nseb.com 🌐 NS Electronics (USA) Inc. 298 S. Sunnyvale Rd., Ste. 201 Sunnyvale, CA 94086 ☎ 408.749.9155 ☎ 408.749.9239 🌐 Thailand (Bangkok, Chaochangasao)</p> | |

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| See detailed descriptions and legend on page 51 | | ⏪ | ⏩ | ⏴ | ⏵ | ⏶ | ⏷ | ⏸ | ⏹ | ⏺ | ⏻ | ⏼ | ⏽ | ⏾ | ⏿ | Ⓜ | ✉ | 🌐 | 🏠 |
|---|-------------|---|--|----------------|----------------|------------------------|------------------------------|--------------|-----|------------------------------|--|---------------|--------------------------------|-------------|---|---|---|--|---|
| <p>Omedata Electronics J1 Soekarno Hatta 176 Bandung, Indonesia 40223 ☎ Not Supplied ☎ +62.22.6030805 ☎ +62.22.6041088 ♦ Jimmy Sidharta</p> | 2,001-5,000 | ↕ | N/A | Not Available | Not Available | A=3, B=1, D=95, E=1 | B | N/A | N/A | Not Supplied | ▲70/30 | B, E | A, C, D | SOIC (300k) | Ⓜ | ✉ | 🌐 | 🏠 | omedata.com ✉ Iffah Irfanny fanny@omedata.com |
| <p>OSE Semiconductor Electronics Ltd. 9 Central 3rd St., N.E.P.Z Kaoshiung, Taiwan 81120 ☎ 1971 ☎ +886.7.3613131 ☎ +886.7.3632319 ⚙ Dr. Eugene Duh ⚙ Edward S. Duh ⚙ Michael Lee (CFO), Chung Lin (AVP of Global Logistics & Sales)</p> | 2,001-5,000 | ↕ | 2329 (Taiwan) \$3.40 (6.97) \$0.12 (10.02) | \$165 Million | \$207 Million | A=54, B=8, C=2, D=36 | B | 1,140 FCBGA | D | ▲121,598 (Cs only) ▲75/25 | B, E, ISO 14001 | A, B, C, D, E | QFP (250k), SO (105M) | Ⓜ | ✉ | 🌐 | 🏠 | ose.com.tw ✉ Chris B.K. Ooi, VP-Sales and Operations cooi@ose-usa.com Ⓜ OSE USA Inc. 2221 Old Oakland Rd. San Jose, CA 95131 ☎ 408.321.3600 🌐 Taiwan (Kaoshiung, 6) 🏠 In April, OSE announced the forthcoming closure of OSE-USA (formerly IPAC) as a manufacturing facility. | |
| <p>Pantronix Corp. 2710 Lakeview Court Fremont, CA 94538 ☎ 1974 ☎ 510.656.5898 ☎ 510.656.7779 ⚙ Stanley Wang ⚙ John Lynch</p> | 2,001-5,000 | ↕ | N/A | Not Available | Not Available | A=75, B=5, D=20 | A, B, C, modules, subsystems | 1,500 | D | ▲50,000 ▲90/10 | B | A, B, D, E | N/A | Ⓜ | ✉ | 🌐 | 🏠 | pantronix.com ✉ Stanley Wang, President ptx@pantronix.com 🌐 China (Shanghai); Fremont, Calif; Philippines (Amertron) | |
| <p>PSi Technologies Electronics Ave., FTI Complex, Taguig, Metro Manila, Philippines ☎ 1988 ☎ +632.838.4966 ☎ +632.838.4648 ⚙ Arthur J. Young Jr. ⚙ Thelma G. Oribello (CFO)</p> | 2,001-5,000 | ↕ | PSIT (NASDAQ) \$25.75 (3.00) \$3.87 (9.01) | \$53.5 Million | \$70.3 Million | A=10, B=40, C=2, D=48 | A, B, C, D (power packages) | N/A | D | ▲22,771 ▲80/20 | B, D, E, ISO 14001, OML Class D, TS16949 | A, E | DPAK, TO-220 | Ⓜ | ✉ | 🌐 | 🏠 | psitechnologies.com ✉ Sam Gomez, VP-North American Operations sag@psitechnologies.com Ⓜ PACSEM Technologies, 4633 Old Ironsides Dr., Ste. 260, Santa Clara, CA 95054 ☎ 408.982.0188 ☎ 408.982.0355 ✉ Mike Gholson, Sales Director (Tempe, AZ) 480.838.5286 tmg@psitechnologies.com Ⓜ PSi Technologies Japan, Tokyo ☎ +81.3.3704.2587 ☎ +81.3.3704.3049 🌐 Philippines (3) | |
| <p>Seiko Epson Tokyo, Japan ☎ +81.266.52.3131 ⚙ Hideaki Yasukawa ⚙ Saburo Kusama</p> | 5,000+ | ↕ | N/A | Not Available | Not Available | A=10, B=15, C=45, D=30 | B | 465 FPBGA | E | ▲29,300 ▲90/10 | B, C, E | A, C, D, E | MQFP (6M) | Ⓜ | ✉ | 🌐 | 🏠 | epson.co.jp ✉ Craig McGuire, Marketing Manager cmcguire@eea.epson.com Ⓜ Epson Electronics America Inc. 150 River Oaks Parkway San Jose, CA 95134 ☎ 408.922.0200 🌐 Japan (Sakata); Indonesia (Batam); Singapore | |
| <p>Signetics Korea Paju-si, Kyungki-do, Korea ☎ 1966 ☎ +82.31.940.7928 ☎ +82.31.940.7691 ⚙ H.C. Chang ⚙ K.W. Lee ⚙ S.J. Yang ⚙ C.S. Jeong (CFO)</p> | 1,001-2,000 | ↕ | N/A | Not Available | Not Available | A=50, B=10, D=40 | B | 792 Tape BGA | C | ▲41,806 ▲N/A | A, C, D, E | A, C, D, E | 50 TSOP (5M), 36/48 TFBGA (7M) | Ⓜ | ✉ | 🌐 | 🏠 | signetics.com ✉ Greg Johnson, President Ⓜ Signetics High Technology Inc. 1727 N. First St., Ste. 400 San Jose, CA 95112 ☎ 408.467.4083 ☎ 408.467.0667 🌐 Korea (Anson, Paju) | |

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|--|-------------|----------------------------|-----------------|-----------------|-------------------------------|--------------|--------------------------|---|---------|-------------------------------|---------------|---|---------|------------------|---------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <p>Silicon Turnkey Solutions Inc. 400 Industrial Park Dr. Manteca, CA 95337 ☎ 2000 ☎ 209.239.4444 ☎ 209.239.4882 ★ Zef Malik</p> | <100 | N/A | Not Available | Not Available | A=10, D=90 | A, B, C, D | 1,156+ BGA | B | 6,000 | B, QML and ITR certified | A, C, D, E | 208 QFP (500M), BGA (150M) | Yes Yes | No | No Yes | Yes Yes | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No |
| <p>SPIL Group Nr. 123, Section 3, Da Fong Rd. Taichung, Taiwan ☎ 1984 ☎ +886.4.534.1525 ☎ +886.4.533.0639 ◆ Bough Lin ★ C.W. Tsai ◇ Jong Lin (CFO)</p> | 5,000+ | 2325, SPIL (TAIEX, MASDAQ) | \$475 Million | \$641 Million | A=47, B=0.5, C=2, D=50, E=0.5 | B | 1,936 FCBGA | D | 185,806 | A, C, E, ISO 14001 | A, B, C, D, E | PBGa, QFP, LQFP, SOI, TFBGA, TSOP (<150M) | Yes Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| <p>ST Assembly Test Services (STATS) 5 Yishun St. 23 Singapore 768442 ☎ 1995 ☎ +65.6824.7888 ☎ +65.6822.7822 ★ Charles Richard Wofford ★ Tan Lay Koon ◇ Pearlyne Wang (Acting CFO)</p> | 2,001-5,000 | STTS (MASDAQ) & SGX-ST | \$145.9 Million | \$225.7 Million | A=13.4, B=9, D=77.6 | B, laminates | 900 EBGA, PBGA or XDPBGA | E | 133,249 | A, B, D, E, ISO 14001 | A, B, C, D, E | QFP, QLP, EBGA, PBGA | No No | Yes, proprietary | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| <p>Union Semiconductor Technology Corp. 900 Lowater Rd. Chippewa Falls, WI 54729 ☎ 1998 ☎ 715.720.0252 ☎ 715.720.1418 ★ Jeff Lin</p> | <100 | N/A | Not Available | Not Available | B=5, D=90, E=5 | A, B, C | 8,000 CSP or WLP | B | 1,765 | A, Parametric test | A, B, C, D, E | CSP (100K), 54 TSOP (25K) | No No | Yes, proprietary | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| <p>United Test and Assembly Center (UTAC) 5 Serangoon North Avenue 5 Singapore 554916 ☎ 1998 ☎ +65.481.0033 ☎ +65.551.1168 ★ Charles Chen ★ J.C. Lee ◇ Yeo Mui Sung (CFO)</p> | 1,001-2,000 | N/A | \$59.9 Million | \$88.9 Million | A=71, B=7, C=2, D=20 | B, C | 1,152 FCBGA | E | 36,231 | A, B, E, ISO1401, SAC Level 2 | A, B, C, D, E | FBGA, QFP, TSOP (<20M) | No No | No | Third party | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| <p>Walton Advanced Engineering 18 N. 1st Road, K.E.P.Z. Kaohsiung, Taiwan ☎ 1995 ☎ +886.7.811.1330 ☎ +886.7.811.4732 ★ Y.H. Chiao ★ John Yu</p> | 1,001-2,000 | N/A | \$185 Million | \$147 Million | A=50, B=5, C=40, D=5 | B, laminates | 400 FBGA | B | 65,032 | B, C, E | A, C | µBGA (4M) | No No | No | µBGA, Toshiba | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No |