Q1 2013 Update…

In this issue of the Alert!, Akrion Systems announces the obsolescence of GE Genius I/O module parts used in some GAMA systems. These parts are in mature status and will no longer be manufactured after the end of this year. We recommend that you purchase spare parts now to avoid long lead times and insure continuous operation of your wet station.

In addition to the obsolescence notice above, we offer information about a product enhancement for MEMS manufacturers. This enhancement to our ICE-1™ concentration control technology measures and controls the concentration of chemicals and etch by-products using a commercially available sensor.

Contact your area Sales or Service manager to purchase any of these equipment updates.

The final item in this Alert! is the quarterly update for the list of parts classified as obsolete. As you know this up-to-date Excel list is maintained on the Akrion Systems web site. There is a link to the file on the Spare Parts page which can be accessed from the akrionsystems.com Home Page.

To Ensure Efficient Parts Ordering:

For Spare Parts Return/Repair Information, Inquiries & Purchase Orders:
parts@akrionsystems.com
or by FAX: 1-484-229-0725

In this issue

OBsolescence Alerts

- GAMA: GE Genius I/O module parts

Product Enhancements

- AWP/E200/9400/GAMA/V3: Concentration Control for silicon etch applications

Akrion Systems News

Please note these links:

Spare Parts Order/Inquiry Form:
www.akrionsystems.com/parts-upgrades

Urgent, Critical or Emergency Situations
(Formal Response Within 24 Hours): email to alert@akrionsystems.com

Akrion Systems proactively keeps you informed about obsolete parts so that you can maintain your fab’s capabilities and productivity. If you have questions please contact your local sales or service personnel.

The latest update to the comprehensive list of obsolete parts is always available as an Excel download on the spare parts page at akrionsystems.com.

Stay up to date with the latest Technical Bulletins from Customer Support, sign up for access. Click on the Customer Portal link at the top of the Home Page.
GE Genius I/O Module Parts

Effective Immediately

This notice is to inform you that several component parts of the GE Intelligent Products Genius electronic control module used in GAMA Series systems have reached "mature" status and will no longer be manufactured after December 31, 2013. The vendor is discontinuing the product. New GAMA systems are not affected by this obsolescence.

Akrion Systems recommends purchase of spares to avert the long delivery lead times. Furthermore, only refurbished parts will be available starting in 2014 through a return/repair program. Further details will be provided at a later date.

Applications: GAMA Series wet stations

Current Status:

- New parts will be available through 2013
- Mature status of the components results in longer lead times (up to 8 weeks)

Future Development:

- No new replacement parts will be available beginning in January 2014
- Return and repair program implemented – will continue for 5-7 years
- Estimated turn-around time for return/repair program is two to three weeks

NOTE: Tool specific quotation is required for pricing and equipment down-time estimate

GAMA™ Series Platform

GE Genius Headcase Layout Example

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOM1A0010</td>
<td>GE INPUT BLOCK RTD</td>
</tr>
<tr>
<td>IOM1A0014</td>
<td>G.E GENIUS I/O 16 SINK 24V</td>
</tr>
<tr>
<td>IOM1A0015</td>
<td>G.E GENIUS I/O 32 SINK 24V</td>
</tr>
<tr>
<td>IOM1A0017</td>
<td>4IN/2OUT CURRENT SOURCE</td>
</tr>
</tbody>
</table>

General Information:

- Resources required to install: 1 Field Service or Factory Technician
- Product lead-time from order to shipment (subject to factory production availability): see details in the left column
Concentration Control for Better Etch Performance

Applications: All silicon etch applications for semiconductor and MEMS applications

Features and Benefits:
- The system monitors and controls the concentration of chemicals (e.g. TMAH, KOH, TMAH/IPA) and silicon by-products using a commercially available sensor to produce controlled uniform etch rates
- Reduces cost of ownership (COO) by extending bath lives to increase up-time and overall utilization of the tool
- Simplified process set up reduces the time for field installations
- Eliminates missed processing due to varying etch rates

Upgrade Kit:
One sensor per tank and one analyzer per tool (up to 8 sensors per analyzer)
NOTE: V3 may require additional hardware/software enhancements

General Information:
- Equipment down-time during installation and test (estimated): 2 days per system for chemicals with completed models
- Resources required to install: One (1) Field Service or Factory Technician
- Product lead-time from order to shipment (subject to factory production availability): 12–14 weeks
Replacement Parts List

This is a list of parts that were recently determined to be obsolete. The list includes a short description and the obsolete and replacement parts numbers. Aktron Systems intends to proactively keep you informed about obsolescences so that you can maintain your fab's capabilities and productivity. If you have questions please contact your local sales or service personnel. This information will also be posted as an Excel download on the spare parts page at akronicsystems.com

<table>
<thead>
<tr>
<th>OBSOLETE P/N</th>
<th>REPLACEMENT P/N</th>
<th>PLATFORM</th>
<th>IN-STOCK*</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4128200</td>
<td>PE Required</td>
<td>Goldfinger</td>
<td>YES</td>
<td>PLC DEVICENET SCANNER 90-30</td>
</tr>
<tr>
<td>4129561</td>
<td>238602-001</td>
<td>Goldfinger</td>
<td>NO</td>
<td>SNSR PRESS W/CON NPN</td>
</tr>
<tr>
<td>4129562</td>
<td>238603-001</td>
<td>Goldfinger</td>
<td>YES</td>
<td>SNSR VAC -30 in HG NPN</td>
</tr>
<tr>
<td>4129803</td>
<td>238776-001</td>
<td>Goldfinger</td>
<td>NO</td>
<td>PLC PACRX3I CPU 300Mhz</td>
</tr>
<tr>
<td>4130086</td>
<td>9330345.1</td>
<td>Goldfinger</td>
<td>NO</td>
<td>MOTOR SERVO LINEAR</td>
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<tr>
<td>00046798-00</td>
<td>PE Required</td>
<td>SCP</td>
<td>YES</td>
<td>VALVE-GROUP CP/10 +HW. 10P10-88-CO-N-Y-8C+PB+HW</td>
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<tr>
<td>00049593-00</td>
<td>239226-001</td>
<td>SCP</td>
<td>NO</td>
<td>CIRCUIT BREAKER C.LEITUNGSSCHUTZSCHALTER C.SSX4320-7 3 POLE 20A</td>
</tr>
<tr>
<td>00049611-00</td>
<td>239227-001</td>
<td>SCP</td>
<td>NO</td>
<td>CIRCUIT BREAKER C.LEITUNGSSCHUTZSCHALTER C.SSX4116-7 1 POLE 16A</td>
</tr>
<tr>
<td>212496-001</td>
<td>PE Required</td>
<td>GAMA</td>
<td>YES</td>
<td>HTR TFL MLD IN-L 6 KW W/90DEG OUT W/1/2&quot; FLR DR PORT</td>
</tr>
<tr>
<td>214277-001</td>
<td>PWR1B0100</td>
<td>GAMA</td>
<td>NO</td>
<td>FAN MUFFIN AC MDL MU2B1</td>
</tr>
<tr>
<td>223017-001</td>
<td>238482-001</td>
<td>GAMA</td>
<td>NO</td>
<td>SNSR TEFLON CTD US 1/2&quot; MNPT</td>
</tr>
<tr>
<td>223020-001</td>
<td>238482-001</td>
<td>GAMA</td>
<td>NO</td>
<td>CONT FOR 223017-001 W/ENCL</td>
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<tr>
<td>223029-001</td>
<td>238482-001</td>
<td>GAMA</td>
<td>NO</td>
<td>COSENSE US SNSR &amp; CONT BOX</td>
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<tr>
<td>224915-001</td>
<td>238408-001</td>
<td>GAMA</td>
<td>YES</td>
<td>CONT TEMP (SER SD31) 100-240 VAC</td>
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<tr>
<td>234300-001</td>
<td>238408-001</td>
<td>GAMA</td>
<td>NO</td>
<td>TEMP CONTROLLER</td>
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<tr>
<td>6971041C-00</td>
<td>PE Required</td>
<td>SCP</td>
<td>NO</td>
<td>PUMP. BELLOWS, 3/8 F-NPT AIR, 20-160C. W/POS. LEAK DETECT SEN. IWAKI FH-40R-W02. P-TFE 40 LPM, 1”TU X1”TU</td>
</tr>
</tbody>
</table>

*NOTE: Limited supply of obsolete part stock on hand; this part will not be re-ordered, consult spare parts department for more information

Important Information

General Spare Parts Stocking Policy:
The Aktron Systems LLC spares policy is to maintain a level of inventory for the global market for all product lines based on parts turnover activity. It is not our policy to maintain a safety stock for individual customers or product lines unless obligated by warranty, contract or other commitments. Customers are expected to maintain their own safety stock based on tool utilization and spare parts usage. Alternatively, customers may develop a contractual arrangement with Aktron Systems LLC for stocking predetermined safety stock levels of spare parts for their tool sets.

In Case of Emergencies:
In addition to contacting your local Service Representatives, for emergency situations please send an email message to alert@akronicsystems.com. You will receive a response from Senior Management along with a tracking number for follow-up within 24 hours. This will insure our support escalation process has been put into motion.