REC(U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office (Rev. 03/01) OMB No. 0651-0027 (exp. 05/31/2002) To the Honorable Commissioner of Patents and Trademarks: Please record the auguned original documents or copy thereof. 1. Name of conveying party(ies): Giga-Tronics, Inc., Ascor, Inc. & 2. Name and address of receiving party(ies): Microsource, Inc. Name: Silicon Valley Bank Internal Address: HA155 ☐ Association ☐ Individual(s) Street Address: 3003 Tasman Drive Limited Partnership General Partnership ☐ Corporation-State ☐ Other City: Santa Clara State: CA ZIP: 95054 Additional name(s) of conveying party(ies) attached? Yes 2 No 3. Nature of conveyance: Individual(s) citizenship ☐ Association ☐Merger Assignment ☐ General Partnership Limited Partnership ☐ Change of Name Security Agreement □ Corporation-State-Delaware Other Other _ If assignee is not domiciled in the United States, a domestic representative designation is attached: Yes No Additional name(s) & address(es) attached? ☐ Yes ☑ No Execution Date: June 21, 2004 4. Application number(s) or registration number(s): B. Trademark No.(s) A. Trademark Application No.(s) 76/589.683 3 76/589,682 Additional numbers attached? ☐ Yes X No 6. Total number of applications and registrations involved: 2 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Silicon Valley Bank 7. Total fee (37 CFR 3.41): \$<u>65.00</u> Internal Address: Loan Documentation HA155 ☑ Enclosed Street Address: 3003 Tasman Dr. Authorized to be charged to deposit account City: Santa Clara State: Ca ZIP: 95054 8. Deposit account number: 07/30/2004 NGETACHE 00000020 76589683 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 01 FC:452 40.00 BP 02 FC:8522 25.00 OP

Manbel Arteagu
Name of Person Signing

Manbel Arteagu
Signature

Manbel Arteagu
Signature

9. Statement and signature.

47/13/02

Total number of pages including cover sheet, attachments, and document: 12

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patent & Trademarks, Box Assignments Washington, D.C. 20231

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of June 21, 2004 by and between SILICON VALLEY BANK ("Secured Party"), on the one hand, and GIGA-TRONICS INCORPORATED, a California corporation ("GIGA-TRONICS"); ASCOR, INC., a California corporation ("ASCOR"); and MICROSOURCE, INC., a California corporation ("MICROSOURCE") (individually and collectively, and jointly and severally, "Grantor"), on the other hand.

RECITALS

- A. Secured Party and Grantor are entering into that certain Loan and Security Agreement dated as of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"). Capitalized terms used herein which are not defined, have the meanings set forth in the Loan Agreement, as the case may be.
- B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Secured Party security interests in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to all Intellectual Property and all other Collateral.

NOW, THEREFORE, as collateral security for the payment and performance when due of all of the Obligations, each Grantor hereby grants, represents, warrants, covenants and agrees as follows:

AGREEMENT

- 1. <u>Grant of Security Interest.</u> To secure all of the Obligations, each Grantor grants and pledges to Secured Party a security interest in all of such Grantor's right, title and interest in, to and under its Intellectual Property, including without limitation the following:
- (a) All of present and future United States <u>registered</u> copyrights and copyright registrations, including, without limitation, the registered copyrights, maskworks, software, computer programs and other works of authorship subject to United States copyright protection listed in <u>Exhibit A</u> to this Agreement (and including all of the exclusive rights afforded a copyright registrant in the United States under 17 U.S.C. §106 and any exclusive rights which may in the future arise by act of Congress or otherwise) and all present and future applications for copyright registrations (including applications for copyright registrations of derivative works and compilations) (collectively, the "Registered Copyrights"), and any and all royalties, payments, and other amounts payable to Grantor in connection with the Registered Copyrights, together with all renewals and extensions of the Registered Copyrights, the right to recover for all past, present, and future infringements of the Registered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Registered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto.
- (b) All present and future copyrights, maskworks, software, computer programs and other works of authorship subject to (or capable of becoming subject to) United States copyright protection which are not registered in the United States Copyright Office (the

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"Unregistered Copyrights"), whether now owned or hereafter acquired, and any and all royalties, payments, and other amounts payable to Grantor in connection with the Unregistered Copyrights, together with all renewals and extensions of the Unregistered Copyrights, the right to recover for all past, present, and future infringements of the Unregistered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Unregistered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto. The Registered Copyrights and the Unregistered Copyrights collectively are referred to herein as the "Copyrights."

- (c) All right, title and interest in and to any and all present and future license agreements with respect to the Copyrights.
- (d) All present and future accounts, accounts receivable, royalties, and other rights to payment arising from, in connection with or relating to the Copyrights.
- (e) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");
- (f) All trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");
- (g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the rights identified above;
- (h) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;
- (i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks or Patents; and
- (j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing, and all license royalties and proceeds of infringement suits, and all rights corresponding to the foregoing throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part of the foregoing.
- 2. <u>Loan Agreement.</u> The security interests hereunder are granted in conjunction with the security interests granted to Secured Party under the Loan Agreement. The rights and remedies of Secured Party with respect to the security interests granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Secured Party as a matter of law or equity. Each right, power and remedy of Secured Party provided for herein or in the Loan Agreement or any of the other Loan

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Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Secured Party of any one or more of the rights, powers or remedies provided for in this Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Secured Party, of any or all other rights, powers or remedies.

- 3. <u>Covenants and Warranties.</u> Grantor represents, warrants, covenants and agrees as follows:
- (a) Grantor shall undertake all commercially reasonable measures to cause its employees, agents and independent contractors to assign to Grantor all rights of authorship to any copyrighted material in which Grantor has or may subsequently acquire any right or interest.
- (b) Grantor shall promptly advise Secured Party of any Trademark, Patent or Registered Copyright not specified in this Agreement, which is hereafter acquired by Grantor.
- (c) Section 8(3) of the Schedule to the Loan Agreement hereby is incorporated herein as though fully set forth herein, *mutatis mutandis*.
- 4. General. If any action relating to this Agreement is brought by either party hereto against the other party, the prevailing party shall be entitled to recover reasonable attorneys fees, costs and disbursements. This Agreement may be amended only by a written instrument signed by both parties hereto. To the extent that any provision of this Agreement conflicts with any provision of the Loan Agreement, the provision giving Secured Party greater rights or remedies shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to Secured Party under the Loan Agreement. This Agreement, the Loan Agreement, and the other Loan Documents comprise the entire agreement of the parties with respect to the matters addressed in this Agreement. This Agreement shall be governed by the laws of the State of California, without regard for choice of law provisions. Grantor and Secured Party consent to the nonexclusive jurisdiction of any state or federal court located in Santa Clara County, California.
- 5. WAIVER OF RIGHT TO JURY TRIAL. SECURED PARTY AND GRANTOR EACH HEREBY WAIVE THE RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING BASED UPON, ARISING OUT OF, OR IN ANY WAY RELATING TO: (I) THIS AGREEMENT; OR (II) ANY OTHER PRESENT OR FUTURE INSTRUMENT OR AGREEMENT BETWEEN SECURED PARTY AND GRANTOR; OR (III) ANY CONDUCT, ACTS OR OMISSIONS OF SECURED PARTY OR GRANTOR OR ANY OF THEIR DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS OR ANY OTHER PERSONS AFFILIATED WITH SECURED PARTY OR GRANTOR; IN EACH OF THE FOREGOING CASES, WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE.

[remainder of page intentionally left blank; signature page immediately follows]

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IN WITNESS WHEREOF, the parties have cause this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above. Address of Grantor: Grantor: GIGA-TRONICS INCORPORATED 4650 Norris Canyon Road San Ramon, CA 94583 By: Title: Name: Address of Grantor: Grantor: c/o GIGA-TRONICS INCORPORATED ASCOR, INC. 4650 Norris Canyon Road San Ramon, CA 94583 By: Title: Name: Address of Grantor: Grantor: c/o GIGA-TRONICS INCORPORATED MICROSOURCE, INC. 4650 Norris Canyon Road San Ramon, CA 94583 Bv: Title: Name: Address of Secured Party: Secured Party: 3003 Tasman Drive SILICON VALLEY BANK Santa Clara, California 95054

Form: 3/1/02

Title:

EXHIBIT A

REGISTERED COPYRIGHTS

(including copyrights that are the subject of an application for registration)

Grantor: GIGA-TRONICS INCORPORATED

Title	Registration/ Application Number	Registration/ Application <u>Date</u>
None		

Grantor: ASCOR, INC.

Title	Registration/ Application Number	Registration/ Application <u>Date</u>
None		
	. 1	

Exhibit A SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

Grantor:	MICROSOURCE,	INC

<u>Title</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
None		

Exhibit A SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

EXHIBIT B

PATENTS

Grantor: GIGA-TRONICS INCORPORATED

<u>Title</u>	Registration/ Application Number	Registration/ Application <u>Date</u>
Noise Reduction Method and Appartus for Phase- Locked Loops	5216387	6-1-1993
N-Pi Phase Frequency Detector	5027373	6-25-1991
Modulation Frequency Response Stablized Amplitude Modulation Circuit	4939483	7-3-1990
Wide Range Digital Phase/Frequency Detector	4884035	11-28-1989
N-Pi Phase/Frequency Detector	4878231	10-31-1989
Coaxial Connector For Conrolled Impedance Transmission Lines	4707039	11-17-1987
Low Even-Order Harmonic Distortion Amplifier and Method	4628278	12-9-1986
Mulitiple-Multiple Modulus Prescaler for a Phase- Locked Loop	4573023	2-25-1986
Voltage-Controlled RF Oscillaor Employing Wideband Tunable LC Resonator	4500854	2-19-1985
Phase-Lockd Loop Frequency Sythesizer	4360788	11-23-1982
Controlled Frequency Signal Source Appartus Including A Feedbak Path for the Reduction of Phase Noise	4336505	6-22-1982
Frequency Modulated Phase-Locked Loop Signal source	4321706	3-23-1982

Exhibit B SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

Phase-Locked Loop Frequency Synthesizer Including Compensated Phase and Frequency Modulation	4313209	1-26-1982
Swept Microwave Power Measurement System and Method	4958294	9-18-1990
Modulation Frequency Response Stablilized Amplitude Modulation Circuit	4939483	7-3-1990
True RMS Power Demodulation System and Method for a Modulated RF Signal	4876654	10-24-1989
Calibrated Power Detector	4794325	12-27-1988
Broadband Microwave Detector	4360865	11-23-1982
Text Unavailable on PTO Website	3904959	Unavailable
Text Unavailable on PTO Website	3517213	Unavailable
Text Unavailable on PTO Website	3500065	Unavailable

Grantor: ASCOR, INC.

<u>Title</u>	Registration/ Application Number	Registration/ Application <u>Date</u>
M/Vacum Assisted Walking Beam Apparatus	6510940	7-25-2002
	-	

Exhibit B SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

Grantor: MICROSOURCE, INC.

Title	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
E/(A1) Multi-Resonator Ferrite Microstrip Coupling Filter	App. #09/888,218	06-21-2001
Multi-Resonator Ferrite Microstrip Coupling Filter	6563405	06-21-2001
E/(A1) Planar Coupling of Sherical Ferrites	App. #09/888,285	06-21-2001
Planar Coupling of Sherical Ferrites	6504459	06-21-2001
E/Multi-Octave Tunable Permanent Magnet Ferrrite Resonator	5793268	04-14-1997
E/Programmable-Step, High-Resolution Frequency Synthesizer Which substantially Eliminates Spurious Frequencies Without Adversly Affecting Phase Noise	5146186	9-8-1992
E/Frequency Source Having Yig Absorption/Transmission Filter; for Use in Microwave Signal Generation	4554516	11-19-1985
E/Microwave Switched Amplifier/Multiplier	4401952	08-30-1983

Exhibit B SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

EXHIBIT C

TRADEMARKS

Grantor: GIGA-TRONICS INCORPORATED

Title	Registration/ Application Number	Registration/ Application <u>Date</u>
AUTOMATION XPRESS	76/589,683	4-26-04
WAVEMAKER	76/589,682	4-26-04

Grantor: ASCOR, INC.

Title	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>

Exhibit C SVB/GIGA-TRONICS/Gigatronics IP Sec Agr-2 with completed Exhibits

RECORDED: 07/29/2004