PLANAR MONOLITHICS INDUSTRIES, INC.

RF / MICROWAVE COMPONENTS & MULTIFUNCTION MODULES / SUBSYSTEMS

TECHNICAL CAPABILITIES & FACILITIES PRESENTATION

May 25, 2016
EAST AND WEST COAST OFFICES

WEST COAST FACILITY:
4921 Robert J. Mathews Pkwy, Suite 1
El Dorado Hills, CA 95762 • USA

sales@pmi-rf.com
www.pmi-rf.com/aboutus.htm

EAST COAST FACILITY:
7311-F Grove Road
Frederick, MD 21704 • USA

PMI West Coast
El Dorado Hills, CA

PMI East Coast
Frederick, MD

AMPLIFIERS – SOLID STATE
ATTENUATORS – VARIABLE/PROGRAMMABLE
COUPLERS (QUADRACTURE, 180° & DIRECTIONAL)
DETECTORS – RF/MICROWAVE
DLVAs, ERDLVAs & SDLVAs
DTOs, VCoS, PLo, DROs, & FREQUENCY SYNTHESIZERS
FILTERS & SWITCHED FILTER BANKS
FORM, FIT, FUNCTIONAL PRODUCTS & SERVICES
FREQUENCY DISCRIMINATORS & IFMs
INTEGRATED MIC/MMIC ASSEMBLIES (IMAs)
IQ VECTOR MODULATORS
LIMITERS – RF/MICROWAVE
LOG AMPLIFIERS
MILLIMETER WAVE COMPONENTS (UP TO 50 GHz)
MISCELLANEOUS PRODUCTS
MULTIFUNCTION INTEGRATED ASSEMBLIES (MIAs)
PHASE SHIFTERS & BI-PHASE MODULATORS
POWER DIVIDERS/COMBINERS (PASSIVE & ACTIVE)
PULSE MODULATORS (SPST)
RACK & CHASSIS MOUNT PRODUCTS
RECEIVER FRONT ENDS & TRANSCIEVERS
SDLVAs, ERDLVAs & DLVAs
SINGLE SIDEBAND MODULATORS
SMT & QFN PRODUCTS
SWITCH MATRIXES
SWITCHED FILTER BANKS
SWITCHES – SOLID STATE SYSTEMS – FLY EYE RADARS
THRESHOLD DETECTORS
USB PRODUCTS
Planar Monolithics Industries, Inc. (PMI), an “S” Corporation, was founded by Dr. Ash (Ashok) Gorwara on November 11th, 1989 to take advantage of the growing demand in monolithic based products using Hybrid MIC/MMIC technology. PMI offers its unique DC to 50 GHz products for applications in space, military, telecommunications, communications and consumer electronics.

Today, PMI is being directed into the 21st Century by expanding the applications of RF/Microwave components and subsystems into new, low cost, RF/Microwave receiving and transmitting systems for both civilian and military customers.

Effective April 30 2013, Planar Monolithics Industries Inc. (PMI), 7311-F Grove Road, Frederick, Maryland, USA 21704, USA, http://www.pmi-rf.com acquired 100% of all the assets & property of HARI, LLC, www.harillc.com (Formerly operating as Genesis Microwave Inc., www.genesismicrowave.com ) located at 4980 Hillsdale Circle, Suite B, El Dorado Hills, CA 95762, USA.

These assets include all the test and manufacturing equipment and machinery, designs, Documentation, drawings and Intellectual property in the form of hard copies and in computer format in servers, CD's, storage areas, etc. Also included in these assets are the Office Equipment & Machinery, etc. and Computers, Office furniture, Finished goods, In-process and Raw Materials & Inventories and other Miscellaneous items. In addition to these assets, included are, all the stock in trade, merchandise, fixtures, equipment, goodwill and trade of the known business as "HARI LLC".

All the RF/MICROWAVE products, components, subsystems, etc. being designed, manufactured, serviced and produced by HARI, LLC www.harillc.com (Formerly operating as Genesis Microwave Inc., www.genesismicrowave.com ) until 30th April 30 2013, will now be offered, provided, produced, manufactured and serviced by Planar Monolithics Industries Inc. (PMI), at its West Coast Facilities Operations located at 4921 Robert J. Mathews Parkway, Suite 1, El Dorado Hills, CA 95762, USA.
Planar Monolithics was founded to take advantage of the growing demand in monolithic-based products using the Hybrid MIC/MMIC technology innovations that are mushrooming in a big way all over the world. High performance and reliable products can be obtained by using this technology.

A vacuum existed in the demand for state-of-the-art Hybrid MIC/MMIC Components and Subsystems. Planar Monolithics organization has been setup to Design, Develop, Manufacture, Test, and Market complex state-of-the-art:

- Hybrid RF/Microwave and Monolithics Integrated Circuits (MIC/MMIC) and Components
- Hybrid MIC/MMIC Supercomponents and Subsystems

Planar Monolithics provides its unique products for applications in space, military, communications, telecommunications and industrial electronics systems.

Planar Monolithics Industries, Inc. has been set up to perform research, design, develop, manufacture and market various MIC/MMIC (Microwave Integrated Circuits and Monolithics Microwave Integrated Circuits) Components, Supercomponents, and Subsystems for applications in Telecommunications, Terrestrial, Satellite, and Mobile-Radio Communications, UAVs (Unmanned Aerial Vehicles) & Drones, Defense (ECM, ECCM, ESM, Radars, SIGINT, and Electronic Warfare), Navigation and Marine Electronics, FAA/DOT-Avionics, Ground Based Systems, and Microwave Landing Systems.

Worldwide demand exists for High Reliability, Low Cost systems. Such needs can be satisfied by Planar Monolithics by using its unique Hybrid MIC/MMIC Technologies and products that the team has developed called Application Specific Hybrid Microwave/Monolithics Integrated Circuits (ASHMIC/ASHMMIC*). *Trademark of Planar Monolithics Industries.
As a manufacturer PMI utilizes our own designs for all components, integrated modules and subsystems:
Planar Monolithics Industries, Inc. has been in business for over 25 years as a manufacturer of electronic components for defense applications. Applications such as Receiver Front-Ends, Synthesizers and Transceivers. As well as a large variety of RF components that compliment this target market. Our technical goal is to produce the finest products available that resolve this mathematical statement:

\[ V_{\text{input}} = A \cos(\omega_c t + \phi) \]

**Amplifiers – Solid State**
**Attenuators – Variable/Programmable**
**Couplers (Quadrature, 180° & Directional)**
**Detectors – RF/Microwave**
**DLVAs, ERDLVAs & SDLVAs**
**DTOs, VCOs, PLO, DROs, & Frequency Synthesizers**
**Filters & Switched Filter Banks**
**Form, Fit, Functional Products & Services**
**Frequency Discriminators & IFs**
**Integrated MIC/MMIC Assemblies (IMAs)**
**IQ Vector Modulators**
**Limiters – RF/Microwave**
**Log Amplifiers**
**Millimeter Wave Components (Up to 50 GHz)**
**Miscellaneous Products**
**Multifunction Integrated Assemblies (MIAs)**
**Phase Shifters & Bi-Phase Modulators**
**Power Dividers/Combiners (Passive & Active)**
**Pulse Modulators (SPST)**
**Rack & Chassis Mount Products**
**Receiver Front Ends & Transceivers**
**SDLVAs, ERDLVAs & DLVAs**
**Single Side Band Modulators**
**SMT & QFN Products**
**Switch Matrices**
**Switched Filter Banks**
**Switches – Solid State Systems – Fly Eye Radars**
**Threshold Detectors**
**USB Products**

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Application of PMI DC to 50 GHz Components & Sub-Systems

TYPICAL EW, ECM, ESM RECEIVER FRONT-END

\[ V_{\text{input}} = A \cos(\omega_c t + \phi_t) \]

- **AMPLITUDE**
- **FREQUENCY**
- **PHASE & MODULATION**

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TUNER / SUPERHETRODYNE FRONT-END

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TYPICAL TRANSCEIVER / TRANSPONDER BLOCK DIAGRAM

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TYPICAL RADAR WARNING RECEIVER FRONT-END OR DIRECTION FINDING RECEIVER FRONT-END SUB-SYSTEM
Application of PMI DC to 50 GHz
Components & Sub-Systems

FORM-FIT-FUNCTION AND OBSOLETE PARTS REPLACEMENT

PMI specializes in replacing obsolete parts on old systems. We offer Form-Fit-Functional replacement Parts for any system. If a Source Control Drawing (SCD) is available we can offer a complete solution to meet all of the given electrical, mechanical and environmental specifications. PMI has designed, manufactured and delivered many of these replacement components such as:

- **IF & RF LOG AMPLIFIERS, SDLVAs & DLVAs**
- **LOW NOISE AMPLIFIERS, VARIABLE GAIN AMPLIFIERS & LIMITING AMPLIFIERS**
- **LIMITERS, DETECTORS, HYBRID COUPLERS & POWER DIVIDERS**
- **PHASE SHIFTERS & BI-PHASE MODULATORS**
- **I & Q VECTOR & SINGLE SIDE-BAND MODULATORS**
- **FILTERS AND SWITCH FILTER BANKS**
- **SWITCHES AND ATTENUATORS**
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Systems – Fly Eye Radars
Threshold Detectors
USB Products

SOLID STATE PIN DIODE & FET SWITCHES

20 MHz – 18 GHz SP8T
24 – 40 GHz SPST
50 MHz – 40 GHz SP4T

SP3T PIN DIODE SWITCH
100 Watt SP2T

ULTRA HIGH SPEEDS

SP6T MINIATURE DESIGN

20 WATT SURFACE MOUNT SPDT

CUSTOM DESIGNS

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500 MHz – 18 GHz 20 dB SWITCHED BIT ATTENUATOR

1 – 18 GHz 60 dB DIGITAL ATTENUATOR

DIGITALLY TUNED ATTENUATORS

2 – 4 GHz VOLTAGE VARIABLE ATTENUATOR

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DC -2 GHz SWITCHED BIT ATTENUATOR

8 – 18 GHz 8-BIT DIGITAL ATTENUATOR
PMI PRODUCTS

1 – 2 GHz LNA w/35 dB Gain & 1.4 dB NF
9 – 10 GHz LNA w/37dB Gain & 3dB NF
1.6 – 2.7 GHz Limiting Amplifier w/40 dB Gain & Limited RF Output of +15 dBm
2 – 18 GHz LNA w/30 dB Gain & 4 dB NF

2 – 18 GHz Limiting Amplifier with +21 dBm Limited Output

4-WAY POWER DIVIDER WITH QUAD PHASE OUTPUT OF J2=0°, J3=90°, J4=180° & J5=270°

6 – 19 GHz 2-WAY POWER DIVIDER

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10 GHz Integrated Phase Shifter
Dielectric Resonator Oscillator (DRO) Module

21 GHz Beam Forming Monopulse Circuit

2 – 18 GHz Digitally Tuned Oscillator (DTO)

6 – 18 GHz Synthesizer

2 – 18 GHz Frequency Discriminator

Delay line in a Frequency Discriminator

30 MHz Frequency Discriminator

10 GHz Integrated Phase Shifter and
Dielectric Resonator Oscillator (DRO) Module (Inside)

Digitally Tuned Oscillators (DTOs)

6 – 18 GHz Synthesizer

10 GHz Integrated Phase Shifter
Dielectric Resonator Oscillator (DRO) Module (Inside)
PMI PRODUCTS

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7 – 18 GHz, 75 dB SDLVA

500 MHz – 18 GHz, 50 dB DLVA

7 – 18 GHz, 75 dB DLVA

8 – 18 GHz, 40 dB SDLVA

2 – 4 GHz, 45 dB DLVA

3 – 18 GHz, 70 dB SDLVA

700 – 1250 MHz, 70 dB SDLVA

18 – 40 GHz 65 dB SDLVA

2 – 18 GHz, 65 dB ERDLVA

100 – 700 MHz, 55 dB SDLVA

7 – 18 GHz SDLVA

2 – 18 GHz, 65 dB CW IMMUNE ERDLVA

7 – 18 GHz, 75 dB SDLVA 8 – 18 GHz, 40 dB SDLVA

100 – 700 MHz, 55 dB SDLVA

PMI PRODUCTS

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Switch Matrices
Switched Filter Banks
Switches – Solid State
Systems – Fly Eye Radars
Threshold Detectors
USB Products
PMI PRODUCTS

100 MHz – 18 GHz Transceiver (Phase II)

500 MHz – 40 GHz USB Powered LNA

PMI PRODUCTS

100 MHz – 18 GHz Transceiver (Phase III)

500 MHz – 40 GHz USB Powered SP2T Switch

Vector Modulator

85 MHz – 2 GHz 8 bit 360° Phase Shifter

Double Sided 100 MHz – 18 GHz Switch Filter Bank

4 – 18 GHz Up/Down Converter

2 – 6 GHz 8 bit 360° Phase Shifter

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7311-F GROVE ROAD, FREDERICK, MD:
- 5,000 sq. ft. Facility
- Components Manufacturing
- Sub-Assembly Manufacturing
- Hybrid Assembly
- Filter Manufacturing
- 1,000 sq. ft. Class 10,000 Clean Room
- Engineering Department
- Test Department
- Production Officer
- QA/QC Office
- Sales & Marketing
- Executive Offices
- Conference Room

4921 Robert J. Mathews Pkwy, El Dorado Hills, CA:
- 5,100 sq. ft. Facility
- Components Manufacturing
- Hybrid Assembly
- Test and Engineering Departments
- Production and Quality Departments
- Continued Manufacturing Previous HARI, LLC
- (formally Genesis Microwave)
- Products as listed at www.harillc.com
- and www.genesismicrowave.com

ACCOUNTING & CORPORATE INFO:
- Type “S” Corporation, Pennsylvania
- Peachtree Sage 50, 2013
- EXACT Alliance MRP
- Accrual Basis Accounting Practice
- Fiscal Year is December 31st
- GAAP Guidelines Followed
- Monthly Internal Financial Reports
- Weekly Cash Flow Analysis Reports

7310 GROVE ROAD, FREDERICK, MD:
- 1,000 sq. ft. Facility
- Accounting Offices

5715 INDUSTRY LANE, FREDERICK, MD:
- 2,500 sq. ft. Facility
- High Power Equipment Test Laboratory
- Clean Room
- Conference Room
- 600 sq. ft. 10,000 Clean Room

6590 WATERS EDGE CT, NEW MARKET, MD:
- 4,000 sq. ft. Facility
- CORPORATE HQ
- Conference Rooms & Executive Offices
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<tr>
<th>CUSTOMER</th>
<th>PROGRAM</th>
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<tbody>
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<td>NORTHROP GRUMMAN CORPORATION</td>
<td>CORVAIR</td>
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<td>BALTIMORE, MD &amp; ROLLING MEADOWS, IL</td>
<td>EA-18G</td>
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<td>BAE SYSTEMS, NH</td>
<td>DEWS, F15</td>
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<td>KNIGHT Program</td>
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<td>U2 Program</td>
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<td>TRANSFORMATIONAL SECURITY</td>
<td>CUSTOM THRESHOLD DETECTORS</td>
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<td>MITSUBISHI-MELCO (JAPAN)</td>
<td>SUCCESSIVE DETECTION LOG VIDEO AMPLIFIERS (SDLVAs), F-2</td>
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<td>NAVAL RESEARCH LAB, WASH, DC</td>
<td>AMPLIFIER DETECTOR PRE-AMPLIFIER</td>
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<td>RF MONITOR FOR ANACHOIC CHAMBER</td>
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<td>100 MHz-18 GHz TRANCEIVER</td>
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<td>RAYTHEON MISSILE SYSTESM, AZ</td>
<td>SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVAs)</td>
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<td>L-3 COMMUNICATIONS, TX</td>
<td>SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVAs)</td>
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<td>LOCKHEED MARTIN CO, FL</td>
<td>MK92 FIRE CONTROL SYSTEM (FORM, FIT &amp; FUNCTION SPARES)</td>
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<tr>
<td>MIKES, TURKEY</td>
<td>SPEWS-II (F16) Turkey</td>
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<td>ARGONST, VA</td>
<td>RF DISTRIBUTION UNIT</td>
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<td>IDF (ISRAELI AIR FORCE)</td>
<td>GUNN DIODE OSCILLATORS</td>
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<tr>
<td>WARNER ROBINS AFB, GA</td>
<td>IF LOG AMPLIFIERS (FORM, FIT &amp; FUNCTION SPARES), B-1B</td>
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<td>L-3 COMMUNICATIONS, UT</td>
<td>CUSTOM LIMITERS</td>
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<td>MECTRON, BRAZIL</td>
<td>SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVAs)</td>
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<td>MARS-1, BRAZILIAN AF</td>
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PMI EAST COAST OPERATIONS

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Manufacturing and Standards

Network Analyzers:
- (3) Agilent N5230A PNA (10 MHz to 40 GHz)
- (2) Agilent N5230A PNA (10 MHz to 20 GHz)
- (1) Agilent N4691 E-CAL (10 MHz to 20 GHz)
- (1) Agilent N4692 E-CAL (10 MHz to 40 GHz)
- (1) HP Network Analyzer (10 kHz to 300 MHz)
- (1) HP 5100 Network Analyzer (0.5 to 26.5 GHz)
- (1) Agilent N5230C-420 PNA Network Analyzer (10 MHz to 40 GHz)
- (1) Keysight N5234A PNA-L Network Analyzer (10 MHz to 50 GHz)
- (1) Keysight N4692A E-CAL (10 MHz to 50 GHz)

Noise Figure Meter:
- (1) Agilent N8975A (10 MHz to 26.5 GHz)
  & Downconverter (40 GHz)

Spectrum Analyzer:
- (1) HP 8593E
- (1) HP E4448A PSA Spectrum Analyzer (3 Hz to 50 GHz)
- (1) Keysight N9030A Spectrum Analyzer (3 Hz to 50 GHz)

Power Meter:
- (4) Gigatronics 85418
- (1) Agilent E4418B

Pulse/Signal Generators:
- Agilent E8257D
- HP 8015A
- HP 8350B Sweep Oscillator
- HP Arbitrary Waveform Generator 33120A
- Agilent 33522A Arbitrary Waveform Generator
- (2) Keysight E8257A PSG Analog Signal Generator
- (2) Agilent E8257D PSG Analog Signal Generator

Oscilloscopes:
- Tektronix TES 210 (60 MHz BW)
- (4) Agilent DSO6034A (300 MHz BW)
- (1) Keysight (2 GHz BW)

TWT Power Amplifiers:
- Varian TWTA 7 – 18 GHz, 20W
- CPI TWT Amplifier (2-8 & 8-18 GHz) 300 W CW

Manufacturing Equipment:
- TSE-11-A ESPEC Thermal Shock Chamber
- JEN410 IR Reflow Oven
- Thermo Electron Oven
- Anatech Plasma Cleaner
- Metallurgical Microscope MT1000
- (4) Westbond 74767E Convertible Wire Bonder
- (4) Westbond 747630E-79 Wire Bonder
- (2) Westbond 7400A Welder
- (1) Westbond Bond Pull Center
- (2) Dage Bond Puller
- (1) Unitek Unibond-II Parallel Gap Welder
- (1) HAAS VF0 CNC Milling Machine
- (1) HAAS DT1 CNC Milling Machine
- (1) Hardinge Turret Lathe
- (1) Di-Acro Power Shear
- (1) Brady Label Machine BP-THT-600-11
- (4) Thermal Hot/Cold Plates
- Random Vibration Setup

CAD Software:
- AutoCAD 2005
- AutoCAD 2013
- Altium Designer
- Microwave Office
- SolidWorks 2014
- Gibbs Cam

Standards:
- ISO9001
- MIL-STD-454
- MIL-STD-202
- MIL-STD-883
- MIL-E-5400
- MIL-I-45208
- IPC-A-610 Workmanship Standard
- IPC-J-STD-001 Soldering Standard
- MIL-STD-45662 Calibration Standard

WEST COAST FACILITY:
4921 Robert J. Mathews Pkwy, Suite 1
El Dorado Hills, CA 95762 • USA

sales@pmi-rf.com
www.pmi-rf.com/aboutus.htm

EAST COAST FACILITY:
7311-F Grove Road
Frederick, MD 21704 • USA
PMI West Coast Operations

Amplifiers – Solid State
Attenuators – Variable/Programmable
Couplers (Quadrature, 180° & Directional)
Detectors – RF/Microwave
DLVs, ERDLVs & SDLVs
DOs, VCOs, PLO, DROs, & Frequency Synthesizers
Filters & Switched Filter Banks
Form, Fit, Functional Products & Services
Frequency Discriminators & IFMs
Integrated MIC/MMIC Assemblies (IMAs)
IQ Vector Modulators
Limiters – RF/Microwave
Log Amplifiers
Millimeter Wave Components (Up to 50 GHz)
Miscellaneous Products
Multifunction Integrated Assemblies (MIAs)
Phase Shifters & Bi-Phase Modulators
Power Dividers/Combiners (Passive & Active)
Pulse Modulators (SPST)
Rack & Chassis Mount Products
Receiver Front Ends & Transceivers
SDLVs, ERDLVs & DLVs
Single Side Band Modulators
SMT & QFN Products
Switch Matrices
Switched Filter Banks
Threshold Detectors
USB Products

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EAST COAST FACILITY:
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Network & Spectrum Analyzers:
- (5) HP 8757D Scalar Analyzers
- (1) HP 8720D Network Analyzer
- (1) HP 8563E Spectrum Analyzer
- (1) HP 8592L Spectrum Analyzer
- (2) Keysight N5234A PNA-L Network Analyzer (10 MHz to 50 GHz)

Noise Figure Meters:
- (1) HP 8970A Noise Meter
- (1) HP 8970B Noise Meter
- (1) Agilent 346C Noise Source

Power Meters:
- (1) HP EPM-442 Power Meter
- (2) HP E4412A Power Meter
- (1) HP 437B Power Meter

Pulse/Signal Generators:
- (1) HP 83731B Signal Generator
- (1) HP 83620A Signal Generator
- (1) HP 8013B Pulse Generator
- (4) HP 83620A Sweep Generators

Oscilloscopes:
- (1) HP 54503A Digital Scope & Probe
- (1) Agilent 54624A 100 MHz BW
- (1) Tektronix 2246 100 MHz BW
- (1) Tektronix 2465A 350 MHz BW

Manufacturing Equipment:
- (1) Quincy Model 40 Oven
- (1) Sym-Tek P162PSJ Oven
- (1) Cole/Parm 05015-50 Oven
- (1) Branson 821D Ultrasonic Cleaner
- (1) Pronto 474 Label Maker
- (4) UNITEK Gap Welders
- (1) March Plasmod Plasma Cleaner
- (4) Westbond 7400A Wedge Bonders
- (1) Westbond 70PT-M Bond Pull Center
- (4) Westbond 1200A Die Attach Stations
- (1) HAAS DT1 CNC Milling Machine
- (1) Westbond Bond Pull Center
- (1) Westbond 747677E Convertible Wire Bonder

CAD Software:
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- AutoCAD 2013

Standards:
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- MIL-STD-454
- MIL-STD-202
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- MIL-I-45208
- IPC-A-610 Workmanship Standard
- IPC-J-STD-001 Soldering Standard
- MIL-STD-45662 Calibration Standard
Trained and Experienced ITAR/Export Administrator

Export Compliance Manual

AES (Automated Export System) certified export staff

Long Term Relationships with both DDTC and SNAP-R Personnel

U.S. Government Registration Numbers:
- Cage Code: 05XQ0 (East Coast)
- Cage Code: 71A34 (West Coast)
- DUNS Number: 829998517
- SAM (CCR) Registration: 1998E211401
- Federal Tax ID (TIN): 52-1756966
- DDTC Registrant Code: M16913
- DSS Cleared Facility
International Quality Registrars Corporation

PMI ISO9001 REGISTRATION

Planar Monolithics Industries, Inc.

ISO 9001:2008
Quality Management System - Registration

The organization's QMS has been evaluated according to the International Quality Registrars (IQR) Corporation QMS certification scheme for the following scope:

"Design, Development, and Manufacture of Microwave Frequency Components, Sub-Systems and Systems, and Contract Manufacturing Services"

This QMS certification is subject to periodic audits by International Quality Registrars (IQR) Corporation

Registration No: 15-120885.3Q
Client ID: PMI89
Cert. Expiration Date: 09/18/18
Cert. Issued Date: 09/18/15

IQR QMS Certification Signature

Last Cert. Revision Date: 09/18/15
Initial Cert. Issue Date: 02/24/09
Sheet No: 1 of 1

*This QMS certificate remains the property of International Quality Registrars Corporation and shall be returned immediately upon request, and it is subject to being inspected or withdrawn where the organization fails to comply with the terms and conditions of the signed Registration Assessment Proposal and Agreement. An insurmount or printed certificate can be authenticated online in accordance with IQR's procedures documented at www.IQRCORP.COM

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EAST COAST FACILITY:
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PMI WEST COAST ORGANIZATION CHART

Carol K Mahoney
Management & HR Advisor

Paul James
Accounting Manager

Helen Steinhaus
Director of Operations

John Merriner
Director Of RF/Microwave Log Video Products & Special Projects

Dr. Al Grayzel
Management Advisor & Consulting Scientist

Marian Szymkowicz, Dave Woolsley
Legal Counsel

Dan Soliday
CPA & Business Advisor

Ebee Harshany
QA/QC Supervisor

Harold Hovick
Director Of Manufacturing

Sebastian Pasco
Director Of Sales & Marketing, Principal Applications Engineer

Dr. Ashok Gorwa
President & CEO
Director Of Engineering

Engineering Assembler

Engineering Technician

Kim Du
Assembly Supervisor

Inventory Control

Shipping & Receiving

Viktor Kravchuk
Machine Shop / Design & Drafting

Advisors/Consultants  5
Engineering  1
Sales & Marketing  1
Production Manager  1
Assemblers  5
Technicians  4
Quality Assurance/Quality Control  1
Inventory Control  1
TOTAL  19

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