



**Training Proposal for:**  
**Maxim Integrated Products, Inc.**

**Agreement Number: ET16-0225**

**Panel Meeting of:** November 5, 2015

**ETP Regional Office:** San Francisco Bay Area

**Analyst:** L. Lai

**PROJECT PROFILE**

Contract Attributes:	Retrainee Priority Rate	Industry Sector(s):	Manufacturing  Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Orange, San Diego, San Francisco, and Santa Clara	Repeat Contractor:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Union(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Number of Employees in:	CA: 1,521	U.S.: 3,615	Worldwide: 8,176
<u>Turnover Rate:</u>	10%		
<u>Managers/Supervisors:</u> (% of total trainees)	18%		

**FUNDING DETAIL**

Program Costs	-	(Substantial Contribution)	(High Earner Reduction)	=	<b>Total ETP Funding</b>
\$731,538		\$0	\$0		\$731,538

In-Kind Contribution:	100% of Total ETP Funding Required	\$1,538,370
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**TRAINING PLAN TABLE**

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate	Busines Skills, Computer Skills, Cont. Improv., Mgmt. Skills, Mfg. Skills	713	8-200	0-32	\$1,026	\$17.19
				Weighted Avg: 57			

**Minimum Wage by County:** \$16.02 – Orange County; \$15.93 – San Diego County; and \$16.44 for San Francisco and Santa Clara counties.

**Health Benefits:**  Yes  No This is employer share of cost for healthcare premiums – medical, dental, vision.

**Used to meet the Post-Retention Wage?:**  Yes  No  Maybe

Although employer provides health benefits, they are not being used to meet Post-Retention Wage.

**Wage Range by Occupation**

Occupation Titles	Wage Range	Estimated # of Trainees
Engineer I		112
Engineer II		20
Sales Staff		8
IT Staff I		267
IT Staff II		77
Finance Staff / Admin. Staff / Marketing Staff I		92
Finance Staff / Admin. Staff / Marketing Staff II		12
Manager I		116
Manager II		9

**INTRODUCTION**

Founded in 1983, Maxim Integrated Products, Inc. (Maxim) ([www.maximintegrated.com](http://www.maximintegrated.com)) designs, develops, manufactures, and markets a range of linear and mixed-signal integrated circuits, commonly referred to as analog circuits. The Company caters to the automotive, communications & data center, computing, consumer and industrial markets. Maxim is headquartered in San Jose with facilities in San Francisco, Irvine, and San Diego, all of which are participating in training.

## **PROJECT DETAILS**

The consumer electronics market has exploded with new products within the last five years. The convergence of technologies including low cost, low power multi-core processors, high-density memory, and innovative power management circuits along with the worldwide availability of high speed digital cellular communications has created new classes of products that offer both productivity and convenience to the world market.

The energy distribution automation segment is an actively growing part of the smart grid market. Maxim designs and manufactures integrated circuits that are used by the auto industry to deliver advanced designs for increased energy efficiency, safety, and convenience. Traditional data converters provide high resolution, speed, and coherent sampling which, in combination, allow a utility to optimize power for ultra-efficient distribution and the characterization of faults. Advancements over the past few years are driving the need for lower power, higher accuracy data converters and system solutions. Maxim's analog signal chain integrated circuits are designed for a broad range of applications which include data converters to help satisfy customers requests for more accurate dynamic data to make decisions and respond in as close to real time as possible.

To stay current with these changing technologies and to remain competitive, Maxim must train employees to upgrade, enhance, and expand their skillsets. Internal controls and skills are necessary to form a strong business and leadership core for future growth of the Company. The proposed training will help Maxim improve quality processes, increase services/product, meet new demands for research and development of technological advancements, implement technological enhancements, and expand their existing client base. Operating Certifications for certain manufacturing/production equipment are verified through exams, based on job roles.

### **Training Plan**

Training will be provided at the employer sites and will include employees from the Irvine, San Diego, San Jose, and San Francisco facilities. Training will be delivered via Class/Lab, E-Learning and Computer-Based Training methods.

**Business Skills (10%):** Training will be offered to all occupations. Training will include coaching, negotiating, selling and presentation skills. Trainees will learn these skills and use them to promote the company's products and service offerings.

**Computers Skills (5%):** Training will be offered to all occupations. Topics include Jama Contour and advanced Excel. Trainees will learn to use the product delivery platform to manage and bring complex products to market and generate and customize data.

**Continuous Improvement (10%):** Training will be offered to all occupations. Courses such as Change Management, Concepts of Requirements Management, and ISO will improve productivity and implement new quality processes and standards.

**Management Skills (10%):** Training will be offered to frontline Managers. Topics such as Management Essentials and Effective Management will equip Managers with the skills to improve productivity and communication throughout the organization.

**Manufacturing Skills (65%):** Training will be offered to IT Staff and Engineers. Modules include various manufacturing, processing, implementation, and verification techniques. Through Kaizen sessions and the application of LEAN concepts, training will improve processes and productivity efficiency.

## **Commitment to Training**

Maxim has an annual training budget of approximately \$15,000 per facility for new-hire orientation, anti-harassment, ethics, internet navigation, and basic computer skills. ETP funds will not displace the existing financial commitment to training. Safety training is provided in accordance with all pertinent requirements under state and federal law.

### ➤ Training Infrastructure

Maxim's HR team consisting of five staff members will oversee the implementation of the training program and be responsible for internal administration. An administrative subcontractor will be hired to assist with project administration.

## **RECOMMENDATION**

Staff recommends approval of this proposal.

## **DEVELOPMENT SERVICES**

ADP in San Dimas assisted with development of this proposal for a flat fee of \$15,000.

## **ADMINISTRATIVE SERVICES**

ADP will also perform administrative services in connection with this proposal for a fee not to exceed 11% of payment earned.

## **TRAINING VENDORS**

To Be Determined

## **Exhibit B: Menu Curriculum**

### **Class/Lab Hours**

8-200

Trainees may receive any of the following:

#### **BUSINESS SKILLS**

- Customer Engagement Training
  - Coaching Selling Beyond the Socket
  - Negotiating Beyond the Socket
  - Selling Beyond the Socket
- Maxim Star Group
  - Business Acumen
  - Communication
  - Leadership
  - Product Knowledge
- Presentation Skills

#### **CONTINUOUS IMPROVEMENT**

- Agile Project Management
- Change Management
- Concepts of Requirements Management
- ISO 14001
- ISO 26262
- Operations Management: Management of Quality
- Problem Solving Decision Making (PSDM)
- Project Management Process
- Test Development Engineering

#### **MANUFACTURING SKILLS**

- Adaptive scan with Serializers for Pin-Limited Designs
- Advanced Analog Mixed Signal Simulation
- Advanced Engineering Technology Training
- Advanced Static Timing Analysis with PrimeTime/PrimeTime-Signal Integrity
- Advanced Synthesis with Design Compiler
- Analog Mixed-Signal Design and Model Validation
- Analog Verification
- Assertion Based Dynamic Verification
- Authoring Requirements and Specifications in Contour
- Automotive Digital Design for Test (DFT) to Achieve Low Cost Zero
- Automotive Sales and Applications Training
- Basic System Verilog Training for Test Engineers
- Basics of Metrics Driven Verification
- Basics of SystemVerilog
- Cadence Allegro training
- DeFacTo Hi DFT -Signoff
- Design Constraints for Digital Implementation
- Developing Universal Verification Methodology Environments
- Developing Universal Verification Methodology Reference Models
- Digital DFT Planning

- Electronic Research Collections Framework/Cockpit
- Equivalency Checking
- Excellicon ConMan/ConCert - Verification Tool for Digital Design constraints
- Functional Verification Recommended Methodology Flow
- Industrial Programmable Logic Controller Sensors and Control
- Introduction to Behavioral Modeling
- Introduction to Behavioral Modeling with System Verilog Real Number Modeling
- Introduction to Maxim Internet Protocol Reuse
- Introduction to Verification Planning
- Language Programming Introduction 6.1.5
- Live Labs
- Low Power Design and Implementation
- Low Power Verification for Front-End Mixed-Signal Design
- LTX Tester Training
- Managing Software Requirements using Contour
- Maxim Masters
- Maxim-EDA-M135 – Maxim ABM Lib
- Modeling Specification and Methodology
- Monthly Technology Updates
- Partitioning for Mixed Signal Verification
- Real Intent Ascent for Register Transfer Level lining
- Real Intent Meridian for Clock Domain Crossing checks
- Register Transfer Level and Design Best Practices: Clock/Reset Architectures
- S90 Digital DFT
- Schematic Model Generator (SMG)
- Sensors for Medical Applications
- Simulation of Silicon Tests
- Static Timing Analysis
- SV-RNM Part II : Practicing Behavioral Modeling with System Verilog Real Number Modeling (SV-RNM)
- Switching Power Supply Fundamentals
- Synopsys DFTMAX Compression
- Synthesis - Register Transfer Level synthesis for digital designs
- System Verilog for Test benches
- Teradyne Tester Training
- Test Down Floor planning (TDFP) Automation
- Tools Technology
- Universal Verification Methodology - The Big Picture
- Viewing and Reviewing Projects in Contour
- Virtuoso Constraints Management Basics
- Virtuoso Floor planner (VFP)
- Wearables Technology Training
- WREAL for Behavioral Modeling

**MANAGEMENT SKILLS (Managers Only)**

- Adopting the Appropriate Management Style
- Effective Management: Cultivating Great Teams
- Maxim Fierce Conversations workshop
- Maxim Management Essentials

**E-Learning**

0-3

**BUSINESS SKILLS**

- Customer Engagement

**CBT Hours**

0-32

**BUSINESS SKILLS**

- 10 Easy Ways to Facilitate Meetings - .5 Hour
- 8 Disciplines Overview - Maxim Addendum - 2 hours
- Maxim 8 Disciplines for a Comprehensive Capital Analysis and Review – 2 hours

**COMPUTER SKILLS**

- Advanced Customization in Excel - 2 Hours
- Advanced Data Analysis in Excel - 2 Hours
- Advanced Data Exchange in Excel - 2 Hours
- Advanced Formatting in Excel - 2 Hours
- Automating Excel Tasks Using Macros- 2 Hours
- Bosch 8D Training – 2 hours
- Jama Contour - Activities and Notifications - .5 Hours
- Jama Contour – Exports - .5 Hours
- Jama Contour – Importing - .5 Hours
- Jama Contour – Items – 1 Hour
- Jama Contour - Managing Change – 1 Hour
- Jama Contour - Review Center – 1 Hour
- Jama Contour - Searching and Filtering - .25 Hour
- Jama Contour - Test Management - .5 Hour
- Jama Contour – Traceability - .5 Hours
- Jama Contour – Workspace - .5 Hours
- Manipulating and Formatting Data and Worksheets in Excel - 2 Hours

**CONTINUOUS IMPROVEMENT (10%)**

- Parasitic Capacitors – 1 Hour
- Principles of Statistical Process Control (SPC): Introduction – 1 Hour
- Principles of SPC: Understanding a Process – 1Hour
- Principles of SPC: Statistical Control – 1 Hour
- Principles of SPC: Action – 1 Hour
- Principles of SPC: Capability – 1 Hour
- Principles of SPC: Benefits of SPC – 1 Hour

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery. CBT is capped at 50% of total training hours, per trainee.