

# OMNI TRAINING

OmniTraining.com

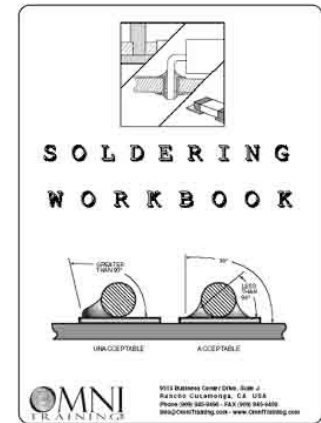
(909) 941-9495



## Your Satisfaction is our Goal



*Let us assist you with your training and certification along with the products that support your training needs.*



# 2023-24 OMNI TRAINING SCHEDULE

## IPC Instructor and Specialist Certification Courses

### **IPC-A-610 CIT Certification Course**

OCT 9-12, NOV 6-9, DEC 18-21, JAN 2-5, MAR 11-14, MAY 20-23, JUL 22-25, AUG 19-22, SEPT 30-OCT 3, NOV 12-15

### **IPC-A-610 CIT *Recertification* Course**

OCT 2-3, NOV 27-28, JAN 8-9, FEB 12-13, MAR 4-5, APR 1-2, MAY 13-14, JUN 3-4, JUL 15-16, AUG 12-13, OCT 14-15, DEC 16-17

### **IPC-A-610 CIT *ONLINE* Recertification Course - TBD**

### **IPC-A-610 CIS Certification Course - (on-site available) - TBD**



### **J-STD-001 CIT Certification Course**

OCT 16-20, NOV 13-17, DEC 11-15, JAN 15-19, FEB 5-9, MAR 18-22, APR 8-12, MAY 6-10, JUN 10-14, JUL 8-12, AUG 5-9, SEPT 9-13, OCT 7-11, NOV 4-8, DEC 9-13

### **J-STD-001 CIT *Recertification* Course**

OCT 4-5, NOV 29-30, JAN 10-11, FEB 14-15, MAR 6-7, APR 3-4, MAY 15-16, JUN 5-6, JUL 17-18, AUG 14-15, SEPT 4-5, OCT 16-17, NOV 25-26, DEC 18-19

### **J-STD-001 CIT Space Addendum Certification Course**

DEC 1, JAN 12, FEB 16, MAR 8, APR 5, MAY 17, JUN 7, JUL 19, AUG 16, SEPT 6, OCT 18, NOV 27, DEC 20

### **J-STD-001 CIS Cert Course** OCT 23-26, DEC 4-7, JAN 29-FEB 1, FEB 19-22, MAR 25-28, APR 29-MAY 2, MAY 28-31, JUL 29-AUG 1, OCT 28-31, Dec 2-5

### **J-STD-001 CIS *Recertification* Course - TBD (on-site available)**



### **IPC/WHMA-A-620 CIT Certification Course**

JAN 22-25, APR 15-18, JUN 17-20, SEPT 16-19, NOV 18-21

### **IPC/WHMA-A-620 CIT *Recertification***

MAR 20-21, JUL 6-7, SEPT 7-8

### **IPC/WHMA-A-620 CIT *ONLINE* Recertification**

TBD

### **IPC/WHMA-A-620 “Hands-on” Certification Course**

JAN 26, APR 19, JUN 21, SEPT 20, NOV 22.

### **IPC/WHMA-A-620 CIS Certification Course (on-site available)**

JUL 1-3

### **IPC/WHMA-A-620 Space Addendum Certification Course**

APR 22-26, SEPT 23-27



### **IPC-7711/7721 CIT Certification Course**

FEB 26-MAR 1, JUN 24-28, AUG 26-30, OCT 21-25

### **IPC-7711/7721 CIT *Recertification* Course**

TBD

### **IPC-7711/7721 CIS Certification Course - TBD (on-site available)**

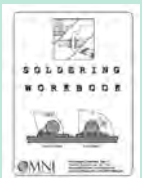


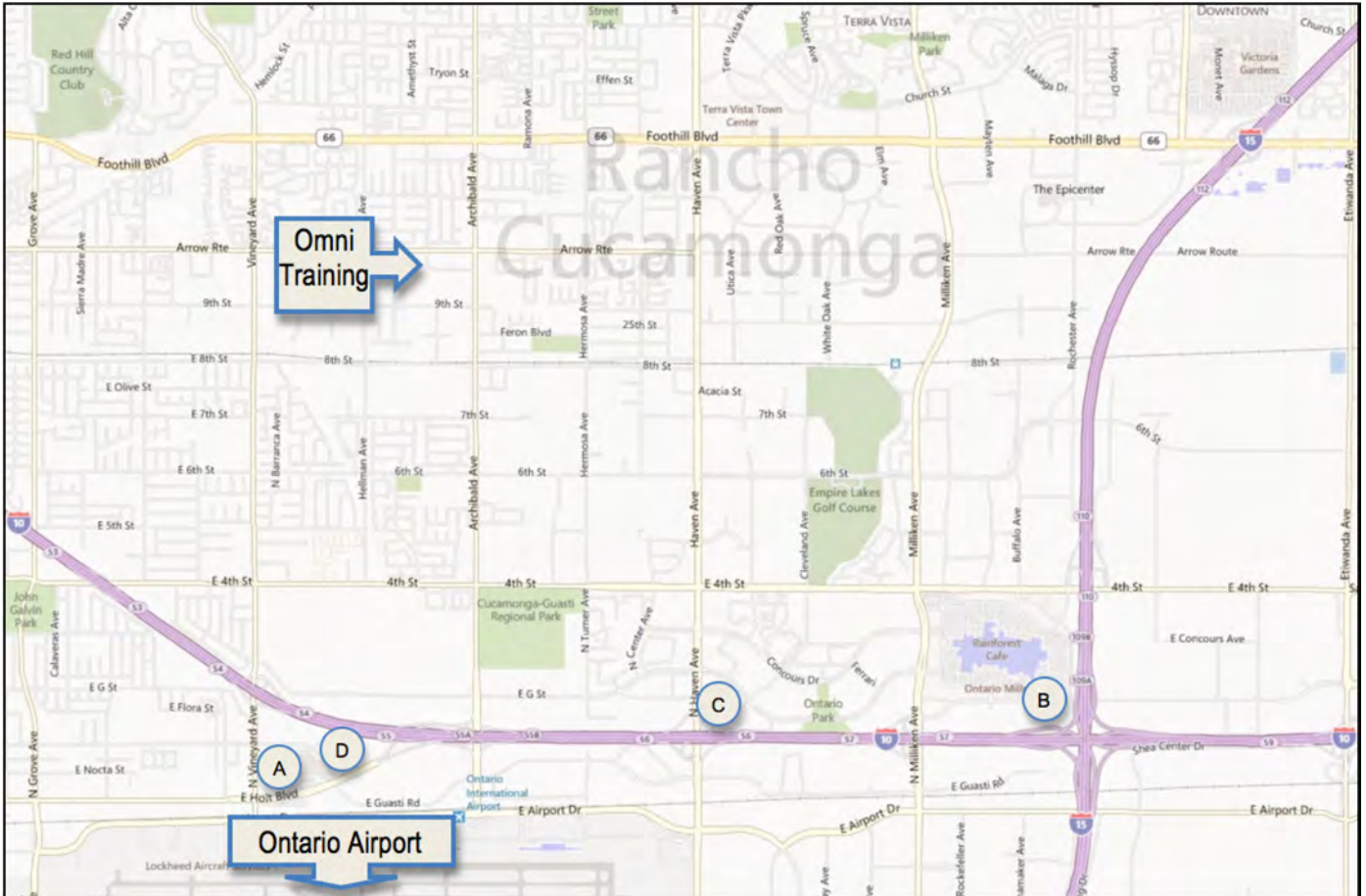
## Omni Training “Skills Intensive” Hands-on Courses

Operator & Inspector Certification covering various IPC documents

### **OMNI TRAINING “Skills-intensive” Proficiency Certification**

AVAILABLE ON-SITE





## HOTEL RECOMMENDATIONS

### Best Western Plus Heritage Inn

8179 Spruce Ave, Rancho Cucamonga  
(909) 466-1111  
(nearest to Omni Training)

Take advantage of recreational opportunities offered, including an outdoor pool, a spa tub, and a fitness center. Additional features at this hotel include complimentary wireless Internet access and a television in a common area. Guests can catch a ride on the complimentary shuttle, which operates within 3 mi.

### Holiday Inn

2155 E Convention Center Way, Ontario, CA 91764  
(909) 212-8000  
(location "D" on map)

Featured amenities include a business center, complimentary newspapers in the lobby, and dry cleaning/laundry services. A roundtrip airport shuttle is provided at no charge. All rooms feature refrigerators and microwaves. Flat-screen televisions with satellite programming provide entertainment, while complimentary wireless Internet access keeps you connected. Conveniences include safes and desks, as well as phones with free local calls.

### Residence Inn by Marriott

2025 Convention Center Way Ontario, CA 91764  
(909) 937-6788  
(location "A" on map)  
Discount for Omni Training Students

Fully equipped kitchens, high speed internet access, hot breakfast, airport shuttle service, outdoor BBQ and pool, laundry facilities, grocery shopping, fitness center.

### Hyatt Place

4760 Mills Circle Ontario, CA 91764  
(909) 980-2200  
(location "B" on map)

All suites hotel. All rooms include microwave, coffee maker with coffee, refrigerator, ironing board with iron, free HBO & ESPN, complimentary breakfast buffet, pool, fitness center, laundry facility, complimentary shuttle to and from Ontario airport.

Call for details on complimentary shuttle from local airport, hotel & Omni.



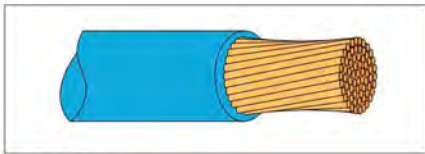


Figure 6-40

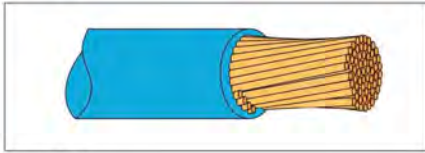


Figure 6-41

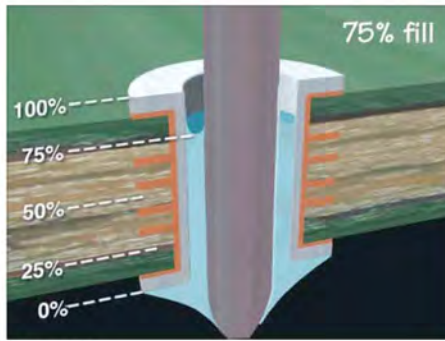


Figure 7-89

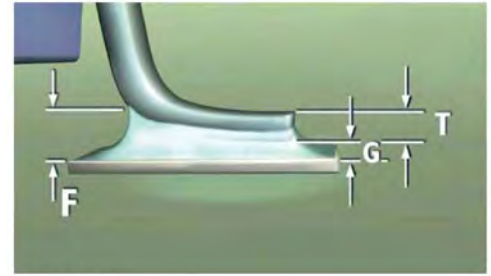


Figure 8-105

# IPC-A-610 Certification Courses

These comprehensive programs supply electronics manufacturers with a uniform method for training and certifying their staff with the knowledge & comprehension of the requirements of **IPC-A-610 Acceptability of Electronic Assemblies**.



## CERTIFIED IPC TRAINER (CIT)

### CIT CERTIFICATION:

The IPC-A-610 Certified IPC Trainer Training & Certification Course is an extensive four (4) day paragraph-by-paragraph review of the IPC-A-610 document. At the conclusion of the Course, students will be subjected to open and closed book written exams. Students who successfully complete this Course are awarded an IPC-A-610 Certified IPC Trainer Certification, valid for two (2) years, authorized to conduct the Certified IPC Application Specialist (CIS) course.

### COURSE MATERIALS:

Students successfully completing this Course will receive: IPC-A-610 Standard and other documents as dictated by IPC.

### CIT RECERTIFICATION:

The IPC-A-610 Certified IPC Trainer Recertification Course is a two (2) day review of the IPC-A-610 Standard. At the conclusion of the Course, students will be subjected to open and closed book written examinations. Students who successfully complete this Course are awarded an IPC-A-610 Certified IPC Trainer Certification valid for two (2) years and are authorized to conduct the Certified IPC Application Specialist Certification Course.

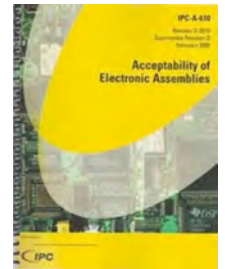
### WHO SHOULD ATTEND:

Ideal candidates for this course can include anyone responsible for Training and/or Quality and should have a background in electronic assembly and tasked to conduct the IPC-A-610 Certified IPC Specialist Course.

## CERTIFIED IPC SPECIALIST (CIS)

### CIS CERTIFICATION:

The IPC-A-610 Certified IPC Application Specialist Course is an extensive up-to three (3) day paragraph-by-paragraph review of the IPC-A-610 Standard. Consists of nine modules (7 optional). At the conclusion of the Course, students will be subjected to open book written examinations. **Contact Omni Training to discuss how this training and certifications can be performed by our experienced instructors on-site at your facility.**



### COURSE MATERIALS:

Students will use be using: IPC-A-610 Standard. Those who successfully pass will be awarded an IPC-A-610 Certified IPC Specialist Certification valid for two (2) years.

### MODULES:

- Module 1: Introduction/IPC Professional Training Policies & Procedures
- Module 2: Foreword, Applicable Documents & Handling
- Module 3: Hardware
- Module 4: Soldering (High Voltage)
- Module 5: Terminal Connections
- Module 6: Through-hole Technology
- Module 7: Surface Mount Assemblies
- Module 8: Component Damage and PCBs & Assemblies
- Module 9: Wire Wrap

### WHO SHOULD ATTEND:

Ideal candidates for this Course are Production/ Rework Operators, Inspectors, Technicians, Quality Control, Manufacturing and Process Engineers and Management personnel who desire to comprehend the proper explanation and interpretation of the requirements of the IPC-A-610.

Scheduled dates are found on page two of this catalog.



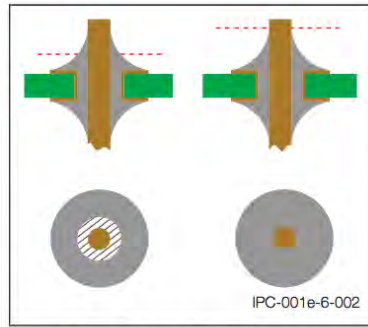
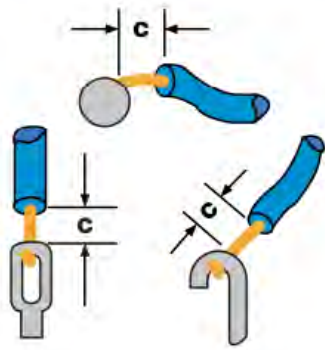


Figure 6-2 Lead Trimming

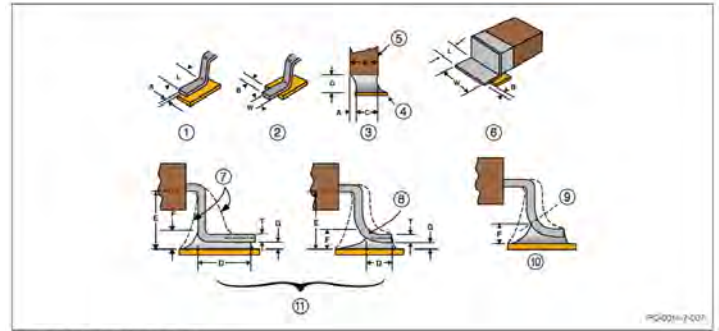


Figure 7-7 Flat Gull Wing Leads

# J-STD-001 Certification Courses

This comprehensive program provides electronics manufacturers a uniform method for training and certifying their staff's comprehension of the requirements of **J-STD-001 Requirements for Soldered Electrical and Electronic Assemblies** and hand soldering skills.



## CERTIFIED IPC TRAINER (CIT)

### CIT CERTIFICATION:

The Certified IPC Trainer Course is a comprehensive five (5) day course providing a review of the document and hands-on soldering training addressing Wire Preparation, Terminals, Through-hole and Surface Mount Technology (SMT). At the conclusion of the Course, students will be subjected to written examinations and must assemble and solder acceptable workmanship samples. Students who successfully complete this course are awarded an IPC Registered Instructor Certification valid for two (2) years.

### COURSE MATERIALS:

Students successfully completing the IPC document for this course and other necessary training materials as designated by IPC as well as the Omni Training Soldering Training Kit required for workmanship samples.

### CIT RECERTIFICATION:

The J-STD-001 Recertification Course is a two (2) day review of the Standard. Students will be subjected to written examinations and must assemble and solder acceptable workmanship samples.

### WHO SHOULD ATTEND:

Ideal candidates for this course can include anyone responsible for Training and/or Quality and should have a background in electronic assembly, good hand dexterity and tasked to conduct the J-STD-001 Certified IPC Specialist Course.

## CERTIFIED IPC SPECIALIST (CIS)

### CIS CERTIFICATION:

This CIS course is modularized, consisting of five (5) separate modules. The course duration ranges from two (2) to five (5) days depending on skills and knowledge required by the individual student. Students will be required to pass written open book exams and, if applicable, assemble and solder acceptable workmanship samples. Also available is Module 6 Space Addendum for Space Hardware. *Contact Omni Training to discuss how this training and certifications can be performed by our experienced instructors on-site at your facility.*



### COURSE MATERIALS:

Students will be using: J-STD-001 Standard and the required components to perform the required hands-on assembly and soldering. Those who successfully pass are awarded a J-STD-001 Certified IPC Application Specialist Certification, valid for two (2) years.

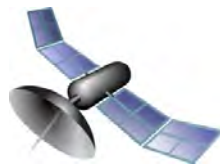
### MODULES:

- Module 1: Specification review
- Module 2: (Optional) Requirements for wire preparation, installation, assembly & soldering of terminals. Includes hands-on.
- Module 3: (Optional) Requirements for assembly & soldering of through-hole assemblies. Includes hands-on.
- Module 4: (Optional) Requirements for assembly & soldering of SMT assemblies. Includes hands-on.
- Module 5: (Optional) Inspection. Requirements for wire preparation, installation, assembly & soldering of terminals, through-hole and SMT assemblies.
- Module 6: (Optional) Space Addendum.

### WHO SHOULD ATTEND:

The ideal candidates are personnel who desire to expand their comprehension

**Now certifying to  
Space Addendum.**



**See page 8 for details.**

Call for details on complimentary shuttle from local airport, hotel & Omni.



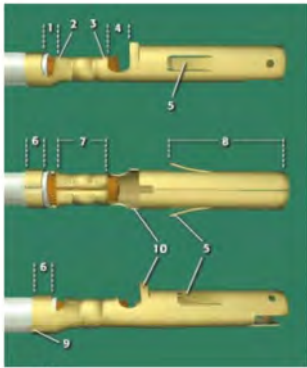


Figure 5-1



Figure 9-34



Figure 13-2



Figure 14-5

# IPC / WHMA-A-620 Certification

This program provides electronics manufacturers with a uniform means of certifying their manufacturing personnel to the requirements of **IPC/WHMA-A-620**

*Requirements & Acceptance of Cable & Wire Harness Assemblies.*



IPC/WHMA-A-620  
Training Center

## CERTIFIED IPC TRAINER (CIT)

### CIT CERTIFICATION:

The IPC/WHMA-A-620 Certified IPC Trainer Certification course consists of a four (4) day (32 hour) program of paragraph-by-paragraph review of the IPC/WHMA-A-620 document. At the conclusion of the course, students will be subjected to open and closed book written examinations. Students who successfully complete the course are awarded an IPC/WHMA-A-620 Certified IPC Trainer Certification valid for two (2) years and are authorized to conduct the Certified IPC Specialist Course.

### COURSE MATERIALS:

Students successfully completing the IPC document for this course and other necessary training materials as designated by IPC.

### CIT RECERTIFICATION:

The IPC/WHMA-A-620 Recertification course is a two (2) day review of the IPC/WHMA-A-620 document. Students will be subjected to written examinations.

### WHO SHOULD ATTEND:

Ideal candidates for this Course can include anyone responsible for Training and/or Quality and should have a background in electronic assembly and tasked to conduct the IPC/WHMA-A-620 Certified IPC Specialist Certification Course.

## CERTIFIED IPC SPECIALIST (CIS)

### CIS CERTIFICATION:

The IPC/WHMA-A-620 Certified IPC Specialist training consists of eight (8) separate modules, 7 of which are optional, of paragraph-by-paragraph review of IPC/WHMA-A-620. At the conclusion of each module, students are subjected to open book exams. **Contact Omni Training to discuss how this training and certifications can be performed by our experienced instructors on-site at your facility.**

### COURSE MATERIALS:

Successful candidates receive a IPC/WHMA-A-620 document and will be awarded a Certified IPC Application Specialist (CIS) certificate valid for two (2) years.



#### Module 1 (mandatory)

Policies and Procedures

1-Forward

3-Preparation

11-Cable Assemblies & Wires

19-Test

#### Module 2

5-Crimp Terminations

6-Insulation Displacement

Connections (IDC)

#### Module 3

4-Soldered Terminations

#### Module 4

9-Connectorization

10-Molding/Potting

#### Module 5

8-Splices

#### Module 6

12-Marking and Labeling

14-Wire Bundle Securing

15-Shielding

16-Cable/Wire Harness

Protective Coverings

17-Finished Assembly

Installation

#### Module 7

13-Coaxial and Twinaxial

Cable Assemblies

#### Module 8

Solderless Wrap

### WHO SHOULD ATTEND:

Ideal candidates for this Course are Production/ Rework Operators, Inspectors, Technicians, Quality Control, Manufacturing and Process Engineers and Management personnel who desire to comprehend the proper explanation and interpretation of the requirements of the IPC / WHMA-A-620.



**Now offering  
training & certification  
to the Space Addendum.  
(See page 8 for details)**



## Complete your Certificate Ask about the IPC/WHMA-A-620 One-Day Hands-on Cable Course

Includes modules H-1 thru H6, which involves a guided step-by-step skills based course of assembly, soldering and crimping two cables and harnessing. This involves topics such as reading and following work instructions, drawings and wire charts, soldering, crimping, connectorization, splicing, application of heat shrink, bundling, two coaxial connectors (soldered and crimped) and marking.

Scheduled dates are found on page two of this catalog.

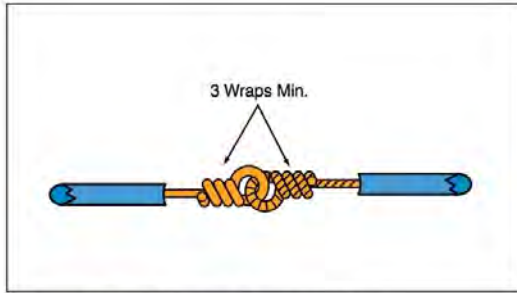


Figure 4 Solder Connections

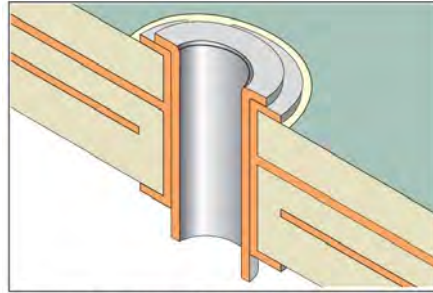


Figure 1 Insert the eyelet into the hole.

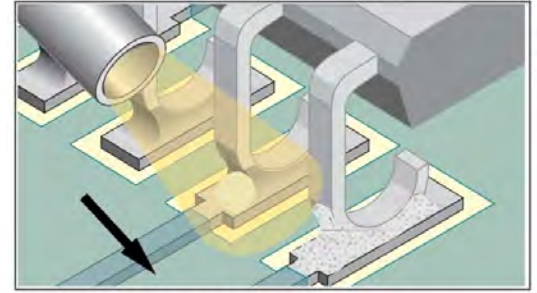


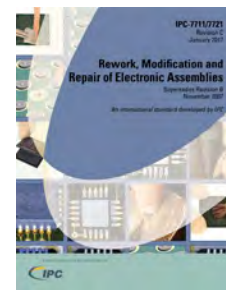
Figure 4 Melt Joints

# IPC-7711 / 7721 Certification Courses

This comprehensive program provides electronics manufacturers a uniform method for training and certifying their staff's comprehension of the guidelines of, and development of skills pertaining to *IPC-7711/7721 Rework, Modification and Repair of Electronic Assemblies*.



IPC-7711/7721  
Training Center



## CERTIFIED IPC TRAINER (CIT)

### CIT CERTIFICATION:

The IPC-7711/7721 Certified IPC Trainer Course is a comprehensive five (5) day Course addressing review of the Standards and hands-on training of Rework and Repair Techniques for Printed Boards and Electronic Assemblies. At the conclusion of the Course, students will be subjected to written examinations and must rework, repair and modify acceptable workmanship samples. Students who successfully complete this Course are awarded an IPC-7711/7721 Certified IPC Trainer Certification valid for two (2) years.

### COURSE MATERIALS:

Students successfully completing the IPC document for this course and other necessary training materials as designated by IPC, as well as the Omni Training Soldering Training Kit required for workmanship samples.

### TOPICS ADDRESSED:

- Wire Splicing
- Jumper Wires
- Through-hole Component Remove/Replace
- Chip & MELF Component Remove/Replace
- SOIC Component Removal/Replacement
- SOT Component Removal/Replacement
- J-Leaded Component Removal/Replacement
- QFP Component Removal/Replacement
- PWB Circuit Repair
- Laminate Repair

### WHO SHOULD ATTEND:

Ideal candidates should have a background in electronic assembly, good hand dexterity, and been tasked to conduct IPC-7711/7721 Certified IPC Specialist Certification Course.

## CERTIFIED IPC SPECIALIST (CIS)

### CIS CERTIFICATION:

The IPC-7711/7721 Certified IPC Specialist Course is modularized with the duration ranging from two (2) to seven (7) days depending on skills and knowledge required by the individual student. Students must rework, repair and modify acceptable workmanship samples. **Contact Omni Training to discuss how this training and certifications can be performed by our experienced instructors on-site at your facility.**

### COURSE MATERIALS:

Successful candidates receive an IPC- 7711/7721 document, soldering training, kit and will be awarded a CIS certificate valid for two (2) years.

### MODULES:

- Module 1 General Knowledge (Mandatory)
- Module 2 Wire Skills (Wire Splice)
- Module 3 Through-hole Component Removal/ Replacement
- Module 4 SMT Chips Removal/ Replacement
- Module 5 SOT and Gull Wing Removal/Replacement
- Module 6 Leaded QFP & J-Leaded Removal/Replacement
- Module 7 Printed Wiring (Trace Repair & Jumper Wires)
- Module 8 Laminate Repair (Board Repair)
- Module 9 Coating Materials (Conformal Coating)

### WHO SHOULD ATTEND:

The ideal candidates for this course are Production/Rework Operators, Inspectors, Technicians, Quality Control, Manufacturing and Process Engineers and Management personnel who desire to expand their comprehension of the rework and repair techniques in the IPC-7711/7721 Standards and receive verification of their hand rework

Scheduled dates are found on page two of this catalog.

Call for details on complimentary shuttle from local airport, hotel & Omni.

# Space Addendum Courses

## IPC/WHMA-A-620 SPACE ADDENDUM CERTIFICATION COURSE



This Space Addendum training & certification program accompanies the IPC/WHMA-A-620 "Requirements and Acceptance for Cable and Wire Harness Assemblies" with a hands-on module. This five-day course begins with a one-day review of the Space Addendum, followed by four days of intensive hands-on training, leading the participant through many of the associated tasks of cable & harnessing, used in space hardware.



All candidates must be currently certified to IPC/WHMA-A-620. Basic skills and general knowledge of tools are recommended but not required. Our instructors will explain the details and walk the participant through each exercise with thorough demonstrations and guidance.

Day One will include a review and testing to the IPC/WHMA-A-620 document and the Space Addendum, focusing on those clauses it affects. Days Two through Five consist of graded hands-on lab sessions, requiring reading assembly drawings, following work instructions, as well as assembly & soldering a variety of space hardware, including but not limited to:

- Coax cable and assembly
- Crimping / pull testing
- Spot ties and tie wraps
- IDC connectors
- Shielding and shield termination
- Floating shields and lash splices
- Protective covering and heat shrink
- Solder Sleeves
- Contact insertion and retention
- Chassis assembly and connector termination



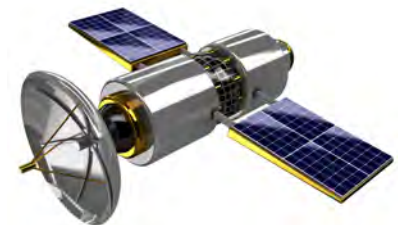
## J-STD-001 SPACE ADDENDUM COURSE



This course is available for both CIT (Certified IPC Trainer) and CIS (Certified IPC Application Specialist) levels. It offers the credential of IPC certification to the Space Addendum to J-STD-001. The course consists of a thorough review of the requirements for Space Applications Electronic Hardware.

This course concludes with a written exam and includes documented certification and a copy of the Space Addendum document.

As a prerequisite, all candidates are required to be currently certified to J-STD-001. Topics covered, include the concerns associated with additional requirements to ensure the reliability of soldered electrical and electronic assemblies that must survive the vibration and thermal cyclic environments getting to and operating in space. The majority of the class will address Table 1, which details the clauses affected by this addendum.





# Omni Training Proficiency Certification Course

*Many traditional classes today are tied to one specification and/or skill. This Omni Training Proficiency Certification is a “skills intensive” course, designed to accomplish three main objectives:*

- 1. HANDS-ON SKILLS;** Students are provided with “skills-intensive” hands-on training, covering the assembly and soldering tasks listed below with lab exercises that will be inspected and graded to assure work is acceptable to Class 3 levels of the quality in the standards that are taught. Each exercise begins with instructor demonstrations, followed by step-by-step practical assembly and soldering and critique of workmanship.
- 2. LEARNING STANDARDS;** This course will include a mixture of lecture, quizzes, and videos, along with various details covered in a PowerPoint presentation, while students follow along with all the necessary standards to use during the class. The documentation covered is an amalgamation of some of the major industry standards used in electrical and electronics assemblies. This is designed for students to become familiar the role of the standards in manufacturing, while receiving an overview of requirements and criteria, with more in-depth details of the topics covered in this course.
- 3. CERTIFICATION CREDENTIAL;** Omni Training has offered this Omni Certification as an independent 3rd party credential required by many contracts for over 41 years. This course provides both inspectors and assembler/solder operator a certification that documents they have received training and passed written and inspection examinations that prove their proficiency.



## COURSE OVERVIEW & SCHEDULE

### DAY ONE:

Solder theory, Intro to Lead-free, “5S”, ESD, Lead-free hands-on Wires & Terminals overview

### DAY TWO:

Lead-free soldering with mixed technology overview. Overview of Cable and harnessing. In-depth Wires, Terminals & Crimping.

### DAY THREE:

Through-hole assembly and rework. Review of applicable IPC workmanship criteria and Rework/Repair Guidelines. In-depth SMT Rework.

### DAY FOUR:

PCB (printed circuit board) inspection and repair, including a review of applicable IPC workmanship criteria and Rework/Repair Guidelines. PCB repair topics, including a review of applicable Rework/Repair Guidelines.



Are you tasked with setting up a training classroom or assembly/soldering area? Let Omni take the difficulty out of this project. The total package can be purchased from one source, including soldering aids. Our original design Terminal Holder and Omni "5S" Organizers are just the solutions for assembly & classroom workstations.

# OMNI "5S"

The Omni 5S Organizer should have been invented years ago. It puts everything you need at your fingertips and makes organizing your work area simple. It also improves efficiency and adds to an ESD safe environment. Thanks for the great product!" **Joseph B. - Regional Training Coordinator, Louisiana**



## Available without tools

- \* Increases productivity reducing times spent looking for tools
- \* 5S compliant (Sort, Straighten, Shine, Standardize & Sustain)
- \* Improves aesthetic appearance of workstation
- \* Organizes assembly and workstations and classrooms
- \* Decreases shrinkage by aiding in end-of-shift accountability
- \* Fitted for wire strippers, cutters, needle and round nose pliers and other hand tools, soldering iron tips of most brands & sizes, solvent and flux dispenser, pencils/pens, tweezers, lead forming tools UC inserter, solder wick tools, soldering aid, flux pen, pen-vac, Exacto knife, dental probes, eye loupe and others.
- \* Includes two small cup openings for holding parts, hardware, terminals, finger cots and/or clippings.
- \* Drip tray slot for solvent brushes
- \* Constructed of durable Conductive ESD Safe material ANSI/ESD S20.20



# TH-1 TERMINAL

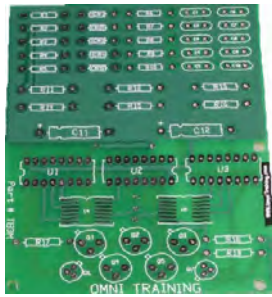
The original Omni Terminal Holder was designed by Omni Training in 1985 to accommodate the five terminals traditionally used in most soldering courses. These terminals simulate various connectors, switches, potentiometers, etc. This one-piece, heat resistant device will allow the turret, bifurcated, pierced, hook and cup terminals to be held in place using a vise during soldering processes with no nuts or bolts to manipulate.



**Call  
(909) 941-9495  
for details  
on quantity  
discounts**

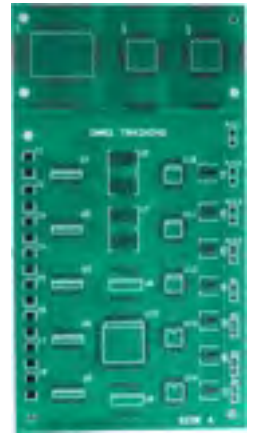


# Printed Circuit Boards



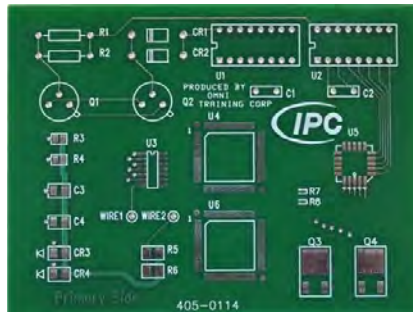
## TB-3 Through-Hole

Originally designed in 1976 by Omni Training, this training board was used in military and commercial courses as a through-hole assembly with an introduction to SMT with flat-packs.



## TB-4 FP Fine Pitch SMT

The TB-4 Fine Pitch is designed to provide practice training sessions dedicated to surface mount assembly, soldering and rework. Everything from 1206 chip components to 25 mil pitch quad flat packs and everything in between on both sides of the board. *(Also available without the fine pitch)*

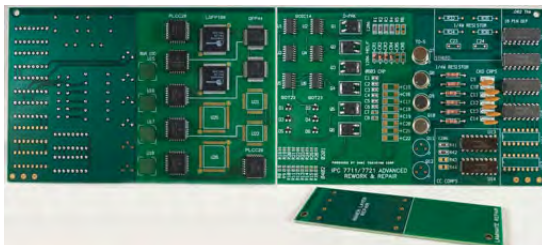


## TB-6 J-STD-001 Certification

This IPC designed board has been used for certification to Modules 3 and 4 of J-STD-001 since its inception. With an equal mixture of through-hole and SMT as well as two wire to through-hole applications.

## TB-LEAD FREE

The Omni TB-Lead-free training board was designed for a one to two day course allowing plenty of practice exercises in through-hole and SMT without the repetition of specific parts. The student can begin with axial leaded components and work their way to fine pitch multi-leaded SMT devices. There's even pads on the back side for circuit repair practice.



## TB-7C IPC-7711/7721 Certification

The IPC-7711/7721 Rework and Repair IPC Certification course uses these boards for the hands-on modules that cover removal and replacement of various components, as well as circuit and laminate repair.

*(both sides of board shown)*

**Let us know if you have any custom requirements.**



# Solder Training Kits

## TK-3 Wires & Terminals Kit

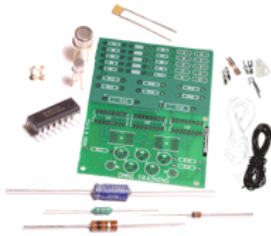


Ideal for initial training of soldering operators with five different terminal types and two different wire gages to allow students the opportunity to refine their assembly and soldering skills.

### Qty Description

- 10 Turret Terminals
- 10 Bifurcated Terminals
- 10 Hook Terminals
- 10 Pierced Terminals
- 10 Cup Terminals
- 10' Stranded Wire 22 AWG
- 10' Stranded Wire 26 AWG

## TK-1 Wires, Terminals & Through-hole Kit

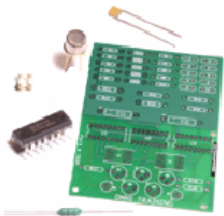


Ideal for initial training of soldering operators. Sufficient components & PCB's provided for students to assemble and solder workmanship samples. Contains most of the conventional through-hole components utilizing supported holes with and without thermal planes to simulate multi-layer challenges.

### Qty Description

- 10 Turret Terminals
- 10 Bifurcated Terminals
- 10 Hook Terminals
- 10 Pierced Terminals
- 10 Cup Terminals
- 10' Stranded Wire 22 AWG
- 10' Stranded Wire 26 AWG
- 2 PCBs
- 10 TO5 Transistors
- 4 TO18 Transistors
- 14 TO5/TO18 Trans. Spacers
- 20 Resistors 1/4 Watt
- 12 Resistors 1/2 Watt
- 10 Axial Diodes
- 20 Radial Capacitors

## TK-1R Pre-employment Screening/Recertification Through-hole



Ideal for recertification training of soldering operators and pre-employment screening. Sufficient components for students to assemble and solder workmanship samples. Contains a sample of the conventional through-hole components utilizing supported holes with and without thermal planes to simulate multi-layer challenges.

### Qty Description

- 1 PCB
- 3 TO5 Transistors
- 3 TO5/TO18 Transistor Spacers
- 7 Resistors 1/4 Watt
- 2 CK05 Capacitors
- 2 DIP IC 16 Lead
- 1 SO5 SOLIC 14 Lead

## TK-620 OPT 620 Optional Hands-On Wire & Harness Kit



This kit contains the required components for assembly, securing, crimping and soldering of the cable and wire harness tasks in the optional hands-on module of the IPC/WHMA-A\_620 certification. This includes, but not limited to; #22AWG stranded wire, coaxial cable, coaxial connectors, 9 pin D-Sub & 15 position D-Sub cup connector, hook and turret terminals, insulated lugs, machine type & stamped and formed crimp contacts, shrink tubing, nylon sleeving braid, tie wrap restraining devices and marker plates Note: tools are not included.

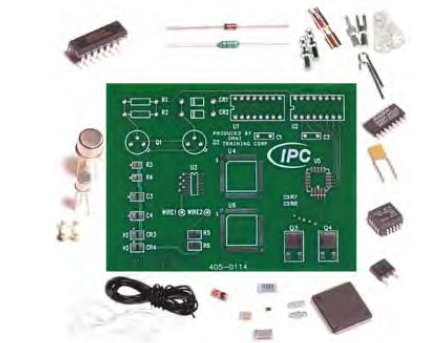
### Qty Description

- 2 Turret Terminals
- 2 Bifurcated Terminals
- 2 Pierced Terminals
- 2 Cup Terminals
- 1' Stranded Wire 20 AWG
- 1' Stranded Wire 22 AWG
- 2 PCBs
- 4 TO5 Transistors
- 4 TO5 Transistor Spacers
- 4 Resistors 1/4 Watt
- 4 Axial Diode
- 2 Radial Capacitors
- 2 Radial Capacitor Spacers
- 4 DIP IC 16 Lead
- 4 Cylindrical End Caps
- 4 0402 Chip Resistors
- 4 0805 Chip Resistors
- 4 1206 Chip Capacitors
- 2 SOIC 14 Lead Gull-Wing
- 2 QFP 100 Lead Gull-Wing
- 2 PLCC 20 J-Lead

## TK-16 IPC

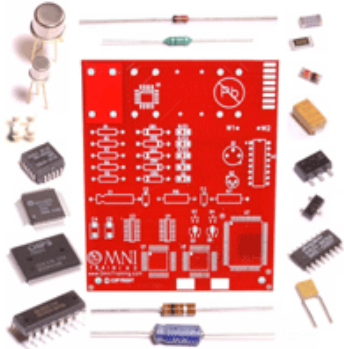
### J-STD-001 Certification Kit

The TK-16 IPC Certification Kit provides two TB-6 PCB's and the necessary wires, terminals, through-hole and SMT components for students to assemble and solder both practice and final workmanship samples. This kit supplies students with sufficient training materials for the required IPC certification to J-STD-001.



# Solder Training Kits

## TK-Lead-Free Mixed Technology Certification Kit

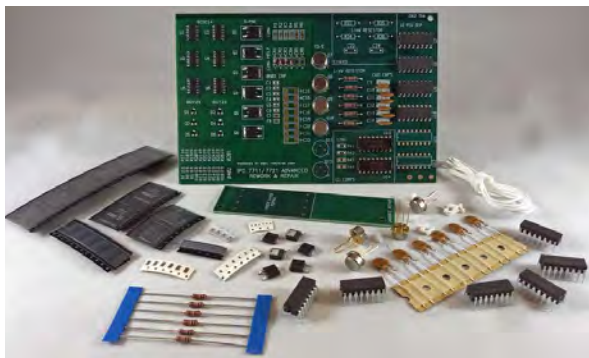


The perfect tool for teaching solder operators and inspectors lessons on lead-free soldering. This mixed technology assembly incorporates a wide variety of through-hole and surface mount applications, including axial and radial leaded devices, leaded and non-leaded surface mounted components. Ideal for assembly rework, as well as extra circuit traces and lands for board repair.

**Qty Description**

- 1 PCB
- 1 TO5 Transistor
- 1 TO18 Transistors
- 2 TO5/TO18 Transistor Spacers
- 5 Resistors 1/4 Watt
- 2 Resistors 1/2 Watt
- 4 Axial Diodes
- 2 Radial Capacitors
- 2 Spacers, Radial Capacitor
- 1 Axial Capacitor
- 1 DIP IC 16 Lead
- 2 Cylindrical End Caps
- 3 1206 Chip Resistors/Capacitors
- 2 SOIC 16 Lead Gull-Wing
- 1 PLCC 20 J-Lead
- 1 QFP 44 Lead Gull-Wing
- 1 QFP 100 Lead Gull-Wing
- 2 Inward Formed L Leaded Caps
- 2 SOT-23 Transistors
- 2 SOT-89 Transistors

## TK-18C IPC-7711/7721 Certification Kit

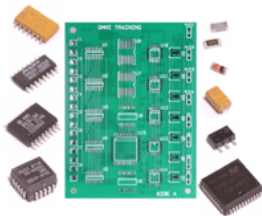


The TK-18C Kit provides the assembled TB-7C Through-hole & SMT PCBs with the wires, terminals and components for student exercises that are required to accomplish the IPC-7711/7721 Rework, Modification & Repair certification. Equipped with a variety of components for removal & replacement with jumper wires and conformally coated section.

**Qty Description**

- 1 TB-7C – Through-hole PCB
- 1 TB-7C – SMT PCB
- 6' Stranded Wire 22 AWG
- 1' Single Strand Wire 30 AWG
- 5 IC6 - DIP IC 16 Lead
- 4 TO5 - TO 5 Transistors
- 4 TO5/TO18 Transistor Spacers
- 5 RC07 - Resistors 1/4 Watt
- 2 D19 - Diode
- 4 CKO - Radial Capacitors
- 4 CKS - Spacers, Radial Capacitors
- 6 CH1R - 1206 Chip Resistors
- 6 CH3C - 0603 Chip Capacitors
- 6 CH4R - 0402 Chip Resistors
- 4 ME1D Cylindrical End Caps
- 5 SO6 - SOT-23 Transistors
- 5 SO4 - SOIC 14 Lead Gull-Wing
- 4 PC3 - PLCC 28 J-Lead
- 2 QFP4 - TQFP 44 Lead
- 2 QFP5 - TQFP 100 Lead
- 4 D-PAK - Bottom Thermal Plane D-Paks

## TK-30 SMT Kit

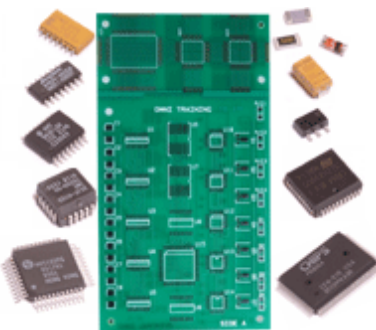


The TK-30 SMT training kit will be sufficient for recertification and verification of the basic skills of the soldering operator for SMT assembly and rework.

**Qty Description**

- 1 SMT PCB
- 8 1206 Chips
- 8 Cylindrical End Caps
- 8 16 Lead SOIC
- 4 PLCC 20 J-Lead
- 7 SOT-89
- 8 Inward-formed L Caps

## TK-20 Fine Pitch SMT Kit



Ideal for initial training of soldering operators with five different terminal types and two different wire gages to allow students the opportunity to refine their assembly and soldering skills.

**Qty Description**

- 1 SMT PCB w/Fine Pitch
- 8 1206 Chips
- 8 Cylindrical End Caps
- 8 16 Lead SOIC
- 4 PLCC 20 J-Lead
- 7 SOT-89
- 8 Inward-formed L Caps
- 2 44 Lead QFP
- 2 100 Lead QFP

**Custom Kits  
supplied upon request.**

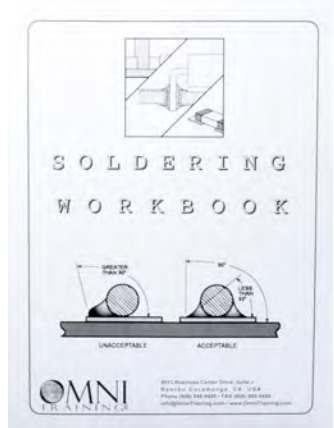


# Workbooks, Handbooks and IPC Documents

## SWB-1 Soldering Workbook

basic soldering theory • lead-free topics • wire preparation • crimping  
soldering terminals • assembly & soldering of through-hole & SMT

This Soldering Workbook is the ideal tool for illustrating common assemblies and gives the student the opportunity to document notes. A perfect companion workbook for those classes that teach unique, company specific criterion. It is also excellent for classes that combine the requirements and acceptability of IPC-A-610, J-STD-001 and/or IPC/WHMA-A-620. Diagrams illustrate topics such as solder theory, solder compositions, flux, wire preparation, crimping, terminal soldering, through-hole assembly and surface mount criteria to name a few. Appropriately placed lines accommodate note taking for better student retention.



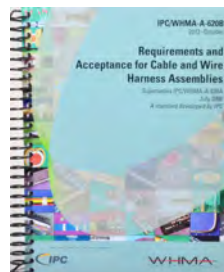
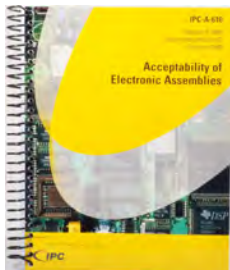
## HBS-4 Wiring & Soldering Handbook



The Wiring and Soldering Handbook was designed to provide the electronics manufacturing industry with a comprehensive step-by-step instructions. The use of this handbook greatly simplifies training of assemblers. The easy to follow process instructions provides the operator with a continual reference tool.

## IPC Documents & Certificates

Those who know Omni are aware that we offer training kits for training and certification courses. As an IPC Certification Center and Distributor we can also be your one-stop shopping for not only certification, but the documents and certificates that accompany CIS certification.



# Posters

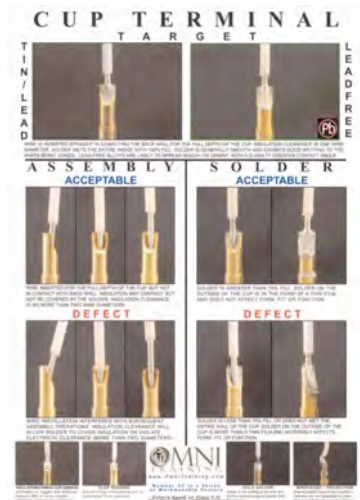
#P-Term A Turret & Bifurcated Terminals



#P-Term B Hook, Pierced & Cup Terminals



#P Term C Cup Terminals



#P-Thru Through-hole Solder Coverage



- PART #**  
 P-Term A Turret & Bifurcated Terminal  
 P-Term B Hook, Pierced & Cup Terminal  
 P-Term C Cup Terminal  
 P-Thru Through-hole Technology  
 P-Comp ID Component Identification  
 P-SMT A SMT (non-leaded components)  
 P-SMT B SMT (leaded components)  
 P-SMT C Gull-wing

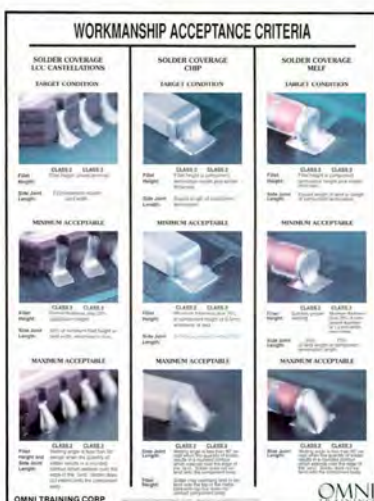
*These posters are approximately 17" x 22"  
 Each are suitable for framing and perfect*



#P-Comp ID Component Identification



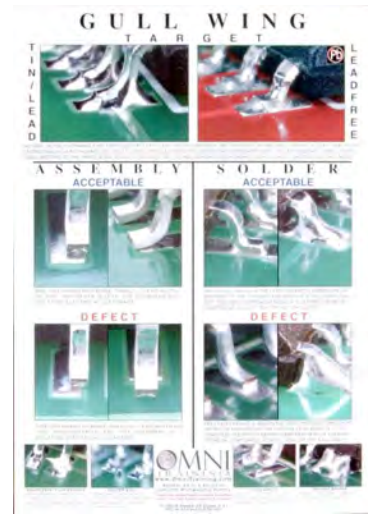
#P-SMT A Castellated, Chip & Cylindrical



#P-SMT B Gull Wing & J-Lead



#P-SMT C Gull Wing Assembly & Solder



# Price List

## TRAINING & CERTIFICATION COURSES

IPC-A-610 CIT Certification Course	call for pricing & availability
IPC-A-610 CIT Recertification Course	
IPC-A-610 CIS Certification/Recertification Course	
J-STD-001 CIT Certification Course	
J-STD-001 CIT Recertification Course	
J-STD-001 CIS Certification/Recertification Course	
IPC-7711/7721 CIT Certification Course	
IPC-7711/7721 CIT Recertification Course	
IPC-7711/7721 CIS Certification/Recertification Course	
IPC/WHMA-A-620 CIT Certification Course	
IPC/WHMA-A-620 CIT Recertification Course	
IPC/WHMA-A-620 CIS Certification/Recertification Course	
Omni "Skills-Intensive" Operator/Inspector Proficiency Certification Course	

## TRAINING AND CERTIFICATION KITS

TK-1 Terminal & Through-hole Kit	\$52.50 ea
TK-1R Through-hole Recertification Kit	\$16.00 ea
TK-2 Standard SMT Kit	\$60.00 ea
TK-2FP Standard and Fine Pitch SMT Kit	\$76.00 ea
TK-3 Wire and Terminals Kit	\$19.00 ea
TK-4 Through-hole Kit	\$34.50 ea
TK-16 J-STD-001 CIS-CIT Certification Mixed-Tech Kit (1-50)	\$29.95 ea
TK-16 J-STD-001 CIS-CIT Certification Mixed-Tech Kit (51-100)	\$26.95 ea
TK-18C IPC-7711/7721 CIS Certification Mixed-Tech Kit	\$109.95 ea
TK-LEAD FREE Mixed-technology Lead-free training Kit	\$29.95 ea
TK-10 Two-Day Terminal & Through-Hole Kit	\$19.50 ea
TK-20 Two-Day Standard and Fine Pitch SMT Kit	\$19.50 ea
TK-30 Two-Day Standard Pitch SMT Kit	\$19.00 ea
TK-620 OPT 620 Optional Hands-On Wire & Harness Kit	\$149.00 ea

## TRAINING & CERTIFICATION PCBs

TB3 Through-hole Double Sided PCB with Ground Plane (Included in our TK-1, TK-1R and TK-4 Kits)	\$7.50 ea
TB4 Standard Pitch Double Sided Printed Circuit Board (Included in our TK-2 Kit)	\$11.00 ea
TB4FP Standard and Fine Pitch Double Sided PCB (Included in our TK-2FP Kit)	\$12.00 ea
TB-5 J-STD-001E CIS-CIT Certification Mixed-Tech PCB	\$12.00 ea
TB-6 J-STD-001 CIS-CIT Certification Mixed-Tech PCB	\$12.00 ea
TB-7C IPC-7711/7721 Rework/Repair CIS-CIT Certification PCB	\$79.95 ea
TB-LEAD FREE Mixed-technology Lead-free training PCB	\$14.95 ea





# Price List *continued*

## WORKBOOKS, HANDBOOKS AND IPC DOCUMENTS

PART #	DESCRIPTION	1-49	50-99	100-199	200-499	500+
SWB-1	Soldering Workbook	\$11.25 ea	\$10.75 ea	\$10.25 ea	\$9.25 ea	\$8.25 ea
HBS-4	Wiring/Soldering Handbook	\$12.95 ea	\$10.95 ea	\$9.95 ea	\$8.95 ea	\$8.00 ea
IPC-1	IPC-A-610 Acceptability of Electronic Assemblies					\$290.00 ea
IPC-1(SP)	IPC-A-610 Acceptability of Electronic Assemblies (Spanish)					\$290.00 ea
IPC-2	J-STD-001 Requirements for Soldered Assemblies					\$240.00 ea
IPC-110	IPC-WHMA-A-620 Requirements and Acceptance for Wire & Harness Assemblies					\$290.00 ea
IPC-108	IPC-A-600 Acceptability of Printed Circuit Boards					\$290.00 ea
IPC-13/14	IPC-7711/21 Rework/Repair and Modification of PCBs & Electronic Assemblies					\$382.00 ea

## WORKSTATION AIDS

ORG-7 Omni 5S Organizer	\$99.95
TH-1 Terminal Holder	\$19.95

## WALL POSTERS

PART #	DESCRIPTION	Price
P-Term A	Turret & Bifurcated Terminal Solder Coverage	\$39.95
P-Term B	Hook, Pierced & Cup Terminal Solder Coverage	\$39.95
P-Term C	Cup Terminal Assembly & Solder Coverage with Lead-Free	\$39.95
P-Thru	Through-hole Technology Solder Coverage	\$39.95
P-Comp ID	Component Identification of Terminals, Through-hole & SMT	\$39.95
P-SMT A	SMT Solder Coverage (non-leaded components)	\$39.95
P-SMT B	SMT Solder Coverage (leaded components)	\$39.95
P-SMT C	Gull-wing SMT Assembly and Solder Requirements with Lead-Free	\$39.95
IPC Posters	IPC Posters	<i>call for details</i>

**PAYMENT TERMS:** C.O.D., VISA and Master Card is accepted. All payments in US dollars.

**RETURNS:**

Prior to returning any materials, please contact us. Returns may be subject to a 15% restocking charge.

**SHIPPING:**

FOB: Rancho Cucamonga, CA USA. All US orders will be shipped UPS Ground unless otherwise requested. International orders will be shipped via UPS.

**EFFECTIVE DATE:** Prices effective: 1/19. Prices subject to change.

### QUANTITY PRICING AVAILABLE UPON REQUEST

Contact information:

Omni Training

9521 Business Center Drive, Suite 102

Rancho Cucamonga, CA 91730

Ph. (909) 941-9495 ♦ Fax (909) 941-9494

