

## SOC Test System – V93000 (SmarTest 7)

更新日期 2020/11/13

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
V93000 I-SMT7	V93000 SOC Digital User Training (SmarTest 7)	5	請洽教育訓練中心	無	1月04~08日 2月01~05日 4月12~16日 5月17~21日 6月21~25日	<p>Enable students to create semiconductor test programs on the V93000 SOC Test Platform. The intent is to provide the skills required to utilize the V93000 Tester Platform as an integral tool in the engineering and production flows of semiconductor device manufacturing. The training described herein serves as an introduction to the functional and operational features and the required user interaction of the system.</p> <p>After completion the student will be familiar with the following:</p> <ol style="list-style-type: none"> <li>(1) Key concepts and components of the V93000</li> <li>(2) Setup basic Digital Test Programs</li> <li>(3) Pin configuration setup of Levels, Timing and Vectors</li> <li>(4) Calibration, Testflow, Test Methods, Debugging tools and concepts</li> <li>(5) DC Testing, Shmoo tools, Data logging, Histograms</li> </ol>
V93000 MST-SMT7	V93000 SOC Mixed Signal User Training (SmarTest 7)	4	請洽教育訓練中心	*V93000 I-SMT7	3月16~19日 6月01~04日	<p>After completing this training, the participant will be familiar with the use of instruments to test mixed signal performance parameters and specifications in the V93000 SOC Series.</p> <p>You will know the steps to:</p> <ol style="list-style-type: none"> <li>(1) Enable students to develop mixed signal device test programs on the V93000 SOC Test Platform. The intent is to provide the skills required to utilize the V93000 Tester Platform as an integral tool in the engineering and production flows of mixed signal device manufacturing.</li> <li>(2) The training described herein serves as an introduction to the functional and operational features and the required user interaction of the system.</li> <li>(3) Develop test programs for mixed-signal devices</li> <li>(4) Use the available tools for developing and debugging mixed-signal</li> </ol>
V93000 PS RF	V93000 SOC Port Scale RF User Training (SmarTest 7)	5	請洽教育訓練中心	*V93000 I-SMT7 *V93000MST-SMT7	4月19~23日	<p>先修課程 Pre-requisites: The prerequisite for this class is the content of the 93000 Basic User Training class and the 93000 Mixed Signal Training class. It is expected that the students have a good understanding of RF fundamentals prior to attending this class.</p> <p>課程目標 Course Object: The purpose of the 93000 Port Scale training series is to enable students to develop and use RF test programs based on 93000 Port Scale RF test system</p> <p>On completion of the course, participants:</p> <ul style="list-style-type: none"> <li>• know HW specification and structure of PSRF subsystem</li> <li>• know how to use software tool to create and measure a CW/Mod signal</li> <li>• know how to do RF calibration</li> <li>• know how to use RF API in Testmethod</li> <li>• know how to do an RF to BB setup &amp; measurement</li> </ul>
V93000 Production-SMT7	V93000 SOC Production Setup Training (SmarTest 7)	2	請洽教育訓練中心	*V93000 I-SMT7	2月25~26日 6月16~17日	<p>The purpose of the V93000 SOC User Training for production setup is to enable students to operate and support production setup activities based on V93000 system.</p> <p>適合對象: (此為初階課程, 適合新進人員)</p> <ul style="list-style-type: none"> <li>- Test Engineers</li> <li>- Product Test engineers</li> <li>- Production System Administrator</li> </ul> <p>On completion of the course, participants:</p> <ol style="list-style-type: none"> <li>(1) will be familiar with and know how to setup/configure production test environment including OS, Smartest and Licensing.</li> <li>(2) know how to create or maintain key components for enabling V93000 production including work-order, Prober/Handler driver and Application Model</li> <li>(3) know how to gather and analyze production data, including GDF,STDF,EDF</li> <li>(4) know the Test cell integration solution including Prober/Handler driver interface</li> </ol>

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V93000 TP	V93000 SOC Test Program Development Training (SmarTest 7)	4	請洽教育訓練中心	*V93000 I-SMT7  *V93000MST-SMT7	3月29~4月1日 5月25~28日	<p>先修課程 Pre-requisites: V93000 Digital User Training, V93000 Mixed Signal Training, Others: C/C++ programming language 適合對象 Target Audience: Test engineer who needs to develop SOC or high speed test program 課程目標 Course Object: This course focus on test program development by using C/C++ style testmethod coding.The purpose of this course is to demonstrate the C/C++ example code by using testmethod API and standard C/C++ library, which includes DC Test, pattern creation, AC Test, high speed Test and Mixed-Signal Test. The TPD2.0 mainly emphasizes the PS1600 feature(sequence DC, TMU, high speed pattern sync and tracking).The TPD2.0 has to add the pattern conversion. So the TPD2.0 course can supply the whole 93k test program development from basic to mixed signal skill. (SMT Version: 7.2.2.4)</p> <p><u>Lecture: DC Test</u> UTM introduction,93K DC resource overview ,FlexDC introduction ,DC set and Mset introduction, sequenced DC introduction, dynamic DC introduction, DC current profile introduction <u>Lecture: Pattern creation</u> Pattern conversion, vector label edit, D2S <u>Lecture: AC Test</u> Clock domain per pin introduction, frequency measurement(DCM), AC parameters measurement by TMU, HW PRBS generator and analyzer, Transition tracking, Clock keep alive <u>Lecture: Mixed Signal Test</u> ADC Distortion/Linearity, DAC Distortion/Linearity, SmartCalc(SMC) introduction, Sequencer burst, How to create the library by UTM</p>
MSF	Mixed Signal Fundamental	3	請洽教育訓練中心	*V93000 I-SMT7  *V93000MST-SMT7	5月11~13日	<p>This training course is using 93K APIs to introduce mixed-signal testing fundamental. Compare with traditional text books(talked about "Signals &amp; Systems"), this course creates a lot of sample programs to explain complicated physcal concepts, such as parameters of sinusoidal, sampling theroem, coherence condition, fast fourier transform.</p> <p>Let trainees refresh what they learned in a different perpestive, also enhance their capability to handle mixed signal testing challenges</p>

### SOC Test System – V93000 (SmarTest 8)

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
V93000 I-SMT8	V93000 SmarTest 8 Basic User Training	5	請洽教育訓練中心	建議熟悉 Fundamental Digital Testing	1月18~22日 3月08~12日 5月03~07日	<p>Enable students to create semiconductor test programs on the V93000 Test Platform under SmarTest 8 software. The intent is to provide the skills required to utilize the V93000 Tester Platform as an integral tool in the engineering and production flows of semiconductor device manufacturing. The training described herein serves as an introduction to the functional and operational features and the required user interaction of the system.</p> <p>After completion the student will be familiar with the following:</p> <ol style="list-style-type: none"> <li>(1) Key concepts and components of the V93000 system</li> <li>(2) Understanding of the SmarTest8 SW concepts and how to use them</li> <li>(3) Setup of test programs using the SmarTest 8 features</li> <li>(4) The setups of Signals, Levels, Timing and Vectors</li> <li>(5) Operating Sequence, Testflow, Test Methods, Debugging tools and concepts</li> <li>(6) DC Testing, Shmoo tools, Data logging, Test tables, Utility lines</li> </ol>

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
V93000 WS MX/RF	V93000 SmarTest 8 Wave Scale MX and RF User Training	3	請洽教育訓 練中心	*V93000I- SMT8	1月26~28日 4月27~29日	<p>先修課程 Pre-requisites: The prerequisite for this class is the content of the 93000 SmarTest8 Basic User Training class. It is expected that the students have a good understanding of RF and mixed signal fundamentals prior to attending this class.</p> <p>適合對象 Target Audience: Test engineers or Product Test engineers who need to develop or support SmarTest8 Wave Scale MX and RF Test program on V93000.</p> <p>課程目標 Course Object: The purpose of V93000 SmarTest8 Wave Scale MX and RF User Training series is to enable students to develop and use RF/Mixed Signal test programs based on V93000 SmarTest8 Wave Scale MX and RF test system. On completion of the course, participants:</p> <p>(1) Know specification, pogos, cabling, and interface of hardware in WSMX/RF. (2) Know how to use SMT8 software to create loopback measurement of WSMX/RF. (3) Know how to use device setup API in SMT8. (4) Know the calibration of WSMX/RF.</p>
V93000 Production- SMT8	V93000 SmarTest 8 Production Integration User Training	2	請洽教育訓 練中心	*V93000I- SMT8	3月03~04日 6月29~30日	<p>Enable the user to use ST8 tools to setup a TestCell and run Production.</p> <p>適合對象: - Test Engineers - Product Test engineers - Production System Administrator</p> <p>After completion the student will be familiar with the following: (1) SMT8 Test Program release to production, including process and usage of workspaces. (2) Test Cell control using TCCT for production engineering. (3) Setup of Test Cell for hand testing using TCCT Recipe setup. (4) Understand how Test Cell related variables can be setup to store production data and how Test Programs can have access to them. (5) Setting-up and simulate Test Cell for testing with a Handler or Prober in offline.</p>
Java	Java Basics Training	2	請洽教育訓 練中心	無	1月11~12日 4月08~09日	<p>適合對象: Those who want to study Smartest 8 TML furtherly.</p> <p>課程目標: (1) Provide the basics of Java programming language (2) Demonstrate the basics of using Smt8 EWC for writing Java programs (3) Practice Java fundamental examples (4) Introduce Java programming structure of Smt8 basic testmethod library</p>

### SOC Test System – V93000 Maintenance

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
V93000 PS H/W	V93000 Maintenance Training - Pin Scale (for SOC & HSM)	4	請洽教育訓 練中心	無	3月22~25日 6月07~10日	<p>This class introduces the principles of V93000 system maintenance and system support for PinScale / SmartScale models, including diagnostics, calibration and troubleshooting. This course is required if you intend to provide hardware self support.</p> <p>The goal of this training is to make you familiar with: (1) Pinscale / SmartScale tester hardware architecture. (2) Routine system maintenance including running diagnostics and calibration. (3) Identify and repair system start and board failures. (4) Support Documentation.</p> <p>Upon completion of this class you will be capable of performing all the standard troubleshooting and maintenance tasks using the provided troubleshooting tools.</p>

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V93000 PS RF H/W	V93000 Maintenance Training - Port Scale RF	2	請洽教育訓 練中心	無	01月13~14日	<p>The goal of this training is to make your familiar with:</p> <ul style="list-style-type: none"> <li>- PortScale RF tester hardware architecture.</li> <li>- Routine system maintenance including running diagnostics and calibration.</li> <li>- Identify and repair system start and board failures.</li> <li>- Support Documentation.</li> </ul> <p>Upon completion of this class you will be capable of performing all the standard troubleshooting and maintenance tasks using the provided troubleshooting tools.</p> <p><u>Training outline:</u></p> <ol style="list-style-type: none"> <li>(1) RF Hardware Elements</li> <li>(2) RF Subsystem Configuration</li> <li>(3) RF Source Card</li> <li>(4) RF Front End Card</li> <li>(5) MB-AV8 Card</li> <li>(6) RF Port naming</li> <li>(7) RF Calibration Hardware (cal kit)</li> <li>(8) Appendix <ul style="list-style-type: none"> <li>- MB-AV8 Characteristic Data</li> <li>- RF DUT Board Interface</li> <li>- Pogo Mapping</li> <li>- System Specs</li> </ul> </li> </ol>

### SOC Test System – T2000 / T6300 LCD Driver

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
T2000	T2000 Basic Programming Training	3	請洽教育訓 練中心	無	3月16~18日 6月01~03日	<p>測試程式開發基礎課程</p> <ol style="list-style-type: none"> <li>1. 愛德萬測試T2000系統軟硬體架構介紹.</li> <li>2. Simulator(R3.05)系統操作環境, 學習ATCP測試程式架構, 並能撰寫簡單的測試程式.</li> </ol> <p>課程內容:</p> <ol style="list-style-type: none"> <li>(1) Hardware and software overview</li> <li>(2) T2000 simulator operation</li> <li>(3) OTPL programming using Advantest Test Class Template Package</li> <li>(4) Test classes code using ATF kit APIs</li> </ol>
T6300	T6300 Series (LCD driver IC) TDL Programming Training	5	請洽教育訓 練中心	無	2月01~05日 4月19~23日 6月21~25日	<p>先修課程 Pre-requisites: Familiarity with methodologies of digital IC test as well as with Unix system and Text Editors, etc.</p> <p>適合對象 Target Audience: No experience in testing or T6300 serial.</p> <p>課程目標 Course Object: This class introduces participants to the T6300 series. Include T6371, T6372 and T6373. Upon completion you will:</p> <ol style="list-style-type: none"> <li>(1) understand hardware structure of the T6300 series</li> <li>(2) be able to create test programs for LCD driver IC</li> <li>(3) know how to generate and analyze test results</li> <li>(4) know how to debug devices and/or test programs</li> </ol>

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
T2000 H/W	T2000 Maintenance Training	2	請洽教育訓練中心	無	1月05~06日 5月11~12日	<p>To provide the maintenance engineer with the basic skills and knowledge required to perform basic troubleshooting and repair, and perform required preventive maintenance routines for Advantest's T2000 Test Systems.</p> <p>The participants can completion following after this training:</p> <ol style="list-style-type: none"> <li>(1) Know HW specification and structure of T2000</li> <li>(2) Know the unit function and signal process of T2000</li> <li>(3) FATAL error troubleshooting</li> <li>(4) Maintenance tasks including diagnostics and calibration</li> </ol>

## Memory Test System

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
T5000 ATL	T5000 Series ATL Programming Elementary Training	4	請洽教育訓練中心	無	1月18~21日	<p>To provide trainees to learn how to start using ADVANTEST memory tester with a simple description of the mechanism, operation and programming. This is achieved through a combination of lectures and lab exercises.</p> <p>The training course coverage is:</p> <ol style="list-style-type: none"> <li>(1) ADVANTEST T5000 memory tester SW/HW overview</li> <li>(2) Main program/socket program/pattern program introduction in ATL</li> <li>(3) FutureSuite basic operation</li> <li>(4) FutureSuite debug/characterization tools</li> <li>(5) Lab exercises covering simple DC test and function test</li> </ol>
T5000 MCI	T5000 Series MCI Programming Basic Training	4	請洽教育訓練中心	無	4月27~30日	<p>Enable the trainees to know the general MCI language skeleton and how to use it to make DC/Function test program under FutureSuite series system. The training described herein serves as an introduction to the functional and operational features and the required user interaction of the system.</p> <p>After completion the trainees will be familiar with the following:</p> <ol style="list-style-type: none"> <li>(1) Key concepts and components of the T5000 series tester.</li> <li>(2) Setup basic test condition with MCI.</li> <li>(3) Be able to develop test program in MCI</li> <li>(4) Calibration, Testflow, Data logging ,Debugging tools and concepts</li> </ol>
T5000 HS DDR4	T5833/T5503 HS DDR4 Test Programming Training	4	請洽教育訓練中心	T5000 ATL	3月22~25日	<p>This course introduces T5833/T5503HS software and hardware capability. The trainee learns how to develop solutions for DDR4 using the hardware feature of T5833/T5503HS test system. This is achieved through a combination of lectures and lab exercises.</p> <p>The training course coverage is:</p> <ol style="list-style-type: none"> <li>(1) DDR4 key specification introduction</li> <li>(2) Test program transfer notice</li> <li>(3) Sourcesync</li> <li>(4) Fixed delay edge mode</li> <li>(5) UBM</li> <li>(6) Hardware timing training</li> <li>(7) CRC,DBI</li> <li>(8) CA parity</li> <li>(9) Lab exercises covering test solution for DDR4</li> </ol>

課程代號	課程名稱	天數	訓練費用	先修課程	開課日期	課程簡介
T5830 MCI	T5830 MCI Flash Programming Training	4	請洽教育訓練中心	T5000 MCI	5月17~20日	Enable students to create MCI test programs on the T5830 Tester. The intent is to provide the skills required to utilize the T5830 Tester as an integral tool in the engineering and production flows of NAND and NOR device manufacturing. The training described herein serves as an introduction to the functional and operational features.  After completion the student will be familiar with the following: (1) Understand key concepts and test system features of the T5830. (2) Be able to develop T5830 test programs in MCI (3) Realize FCM/CFM/BBM/UBM/DBM usage (4) Realize how to generate and analyze test results (5) Realize how to debug devices and/or test programs
T5500 H/W	T5500 Maintenance Training	2	請洽教育訓練中心	無	如果您有此課程需求,請與本教育訓練中心聯絡.	The participants can completion following after this training (1) Know HW specification and structure of T55XX (2) Know the unit function and signal process of T55XX (3) Know the basic device test flow (4) Know the basic maintenance method (5) Know the basic test flow if T55XX
M6242 H/W	M6242 Operation Training	2	請洽教育訓練中心	無	如果您有此課程需求,請與本教育訓練中心聯絡.	The participants can completion following after this training (1) To know Handler Software Screen Configuration and Basic Operations. (2) To Know Handler Operation Start to End (3) To Know Clearing Alarms/ Jam (4) To Know Safety Functions (5) To Know Changing Kit Replacement (6) To Know Backing Up Handler Data

#### 報名注意事項:

- 報名者請詳填報名表, 並透過 Email 方式將報名表寄給教育訓練中心余小姐 [dana-hj.yu@advantest.com](mailto:dana-hj.yu@advantest.com)  
於報名過程中若有任何問題, 歡迎電洽本教育訓練中心 (TEL: 03-5975723) 與余小姐聯繫。
- 教育訓練中心將於開課日前一週以 Email 方式寄發上課通知函給您, 請您以電話或 Email 方式儘快回覆, 以確認開課人數。
- 若於開課前一週未收到上課確認通知函者, 請向本教育訓練中心查詢, 以保障您上課的權益。
- 若您需要取消報名或延後上課, 請您務必於開課日前7個工作日主動通知本教育訓練中心, 若係臨時取消報名或缺席者, 報名單位須負擔全額訓練費用。
- 如無特殊事件發生, 所有課程皆如期舉行, 本教育訓練中心並保留修訂與取消課程之權利。

## ADVANTEST®

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