



*Dear Agilent 5DX Customer*

I'd like to take this opportunity to introduce you to the Automated X-ray Inspection 5DX minor software release version, 8.4. We continue to strive to provide you with a world class X-ray solution that meets and exceeds your manufacturing test needs. The latest version provides several enhancements which will increase testing coverage on Quad-Flat no-lead packages and Direct FET packages. We also are continually reviewing and addressing software quality issues. In version 8.4, you will notice a dramatic improvement in software stability. For further details about the 8.4 releases, please continue to read the following sections.

We hope that this release provides you with the necessary improvements which will improve your overall experience on the 5DX. If you feel we are missing anything or would like to make suggestions on how we can improve the software, we would like to hear from you. Please feel free to contact either your local Agilent 5DX support representative or send an email to [emt-hstd-support\\_americas@agilent.com](mailto:emt-hstd-support_americas@agilent.com)

### **Getting started on the 5DX and TDW**

To start the installation of your 8.4 software, load the 5DX & TDW System Software Version 8.4 (N7200-19532) into the CD-Rom, and follow the installation instructions found on the CD cover insert. After you have installed the software, the system will automatically reboot.

**Single TDW & 5DX Media:** A single CD is available to install either the 5DX update or TDW update. The installation will automatically determine whether the system is a TDW or a 5DX and install the appropriate software.

**Required operating system service packs:** We highly recommend that users run version 8.4 on systems with Windows XP Professional with Service Pack 2. Users with Service Pack 1 will be prompted to install Service Pack 2 prior to installing 8.4. Users with Windows 2000 will not be allowed to run the version 8.4 installation. Version 8.4 will install and run on a Windows NT Service 6 machine but will not run efficiently. This is due to the older version of the OS incompatibilities with the development software tools we use today. Users are encouraged to look into investing in the XP upgrade options that are available to them.

### **Do You Need an Entitlement Certificate?**

If you have not installed a version of release 8.x for the 5DX or release 8.23 for the TDW you will be required to load the license from the Entitlement Certificate. If you cannot find the Entitlement Certificate, please contact your local sales engineer. For further information regarding this release, please visit the following website: <http://www.agilent.com/see/support>

### **Highlights of 8.40 Software Release**

#### **The new QFN algorithm**

QFN is an algorithm based off of the connector algorithm designed to inspect Quad-Flat No lead packages. The QFN packages have leads which vary in shape, size and profile making this a very difficult joint to inspect with the original set of algorithms. With the new QFN algorithm, a user can setup various types of inspection techniques that work best for their current QFN package type. The new algorithm provides tests for open slopes, open signal, fillet length, insufficient solder thicknesses, excess solder thicknesses and solders bridging.

#### **A new testing technique to inspect the side fillets within the Chip algorithm**

Chip now contains several new thresholds that allow for the inspection of solder on the sides of the chip component rather than just on the edges of the components. Insufficient solder, misaligned joints and missing solder is detectable using this technique for the side fillets on Chip packages.



**Colder Solder Joint detection on Direct FET's is now available in Paste**

The Paste algorithm is currently used to inspect for voids which might occur under Direct FET pads. Paste now has an option to use a series of leading edge and trailing edge slope measurements to determine whether the joint is actually an open.

**The same installation CD will install revision 8.4 on both the 5DX and TDW**

The installation will check the software license file and determine whether the system is a 5DX or a TDW, then perform the correct installation.

We hope you will gain more value from the regular enhancements and corrections delivered by our software updates. This 8.4 software release is available to customers on their software support contract. Agilent is committed to providing you with ongoing enhancements and updates so that you can derive more value from your 5DX. For inquiries about the software release or about our support contracts, please contact your local sales engineer. For further information regarding this release, please visit the following website: <http://www.agilent.com/see/support>

Thank you,

Kent Dinkel

Imaging Marketing Manager

\*N7210-90012\*  
N7210-90012