



Agilent M9202A Digitizer

Product Security Features & Certificate of Volatility



Agilent Technologies

Product Declassification and Security

The following products / families are covered by this document:

Model:

M9202A PXI Express 12-bit Wideband IF Digitizer

Manual Part Number

M9202-90014

Edition

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Agilent Technologies, Inc.

Notices

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This symbol indicates separate collection for electrical and electronic equipment, mandated under EU law as of August 13, 2005. All electric and electronic equipment are required to be separated from normal waste for disposal (Reference WEEE Directive, 2002/96/EC).

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Introduction

This document details the internal memory locations of the instrument and describes instrument security features and the steps to declassify an instrument through memory sanitization or removal. For additional information on a particular product, the Agilent Instrument Security Database may be accessed here: www.agilent.com/find/security. For general information the Agilent Aerospace and Defense web page may be found here: www.agilent.com/find/ad.

Terms and Definitions

| | |
|-----------------------------|---|
| Clearing | Clearing is the process of eradicating the data on media before reusing the media so that the data can no longer be retrieved using the standard interfaces on the instrument. Clearing is typically used when the instrument is to remain in an environment with an acceptable level of protection. As defined in Section 8-301a of DoD 5220.22-M, "National Industrial Security Program Operating Manual (NISPOM)", |
| Instrument Declassification | A term that refers to procedures that must be undertaken before an instrument can be removed from a secure environment, such as is the case when the instrument is returned for calibration. Declassification procedures include memory sanitization or memory removal, or both. Agilent declassification procedures are designed to meet the requirements specified in DoD 5220.22-M (NISPOM), Chapter 8. |
| Sanitization | Sanitization is the process of removing or eradicating stored data so that the data cannot be recovered using any known technology. Instrument sanitization is typically required when an instrument is moved from a secure to a non-secure environment such as when it is returned to the factory for calibration. (The instrument is declassified) Agilent memory sanitization procedures are designed for customers who need to meet the requirements specified by the US Defense Security Service (DSS). These requirements are outlined in the "Clearing and Sanitization Matrix" issued by the Cognizant Security Agency (CSA) and referenced in National Industrial Security Program Operating Manual (NISPOM) DoD 5220.22M ISL 01L-1 section 8-301. |
| Secure Erase | Secure Erase is a term that is used to refer to either the clearing or sanitization features of Agilent instruments. |

Instrument Memory

This section contains information on the types of memory available in your instrument. It explains the size of memory, how it is used, its location, volatility, and the sanitization procedure.

Instrument memory locations

| Description | Parameter storage |
|------------------------|---|
| Purpose / Contents | Options, Module capability, Serial number |
| Size / Technology | 4 Kb EEPROM |
| Non-volatile? | Yes |
| User accessible? | No |
| Location in instrument | Control & Processing board |
| Written by | Factory only |
| Sanitization method | None |

| Description | Parameter storage |
|------------------------|----------------------------------|
| Purpose / Contents | Module capability, Serial number |
| Size / Technology | 1 Mb EEPROM |
| Non-volatile? | Yes |
| User accessible? | No |
| Location in instrument | Control & Processing board |
| Written by | Factory only |
| Sanitization method | None |

| Description | Parameter storage |
|------------------------|---------------------|
| Purpose / Contents | Channel parameters |
| Size / Technology | 1 Mb EEPROM |
| Non-volatile? | Yes |
| User accessible? | No |
| Location in instrument | Front-end Mezzanine |
| Written by | Factory only |
| Sanitization method | None |

| Description | Firmware |
|------------------------|------------------------------------|
| Purpose / Contents | Instrument operation FPGA firmware |
| Size / Technology | 128 Mb Flash |
| Non-volatile? | Yes |
| User accessible? | No |
| Location in instrument | Control & Processing board |
| Written by | Factory only |
| Sanitization method | None |

| Description | Acquisition memory |
|------------------------|----------------------------------|
| Purpose / Contents | Acquired measurement data buffer |
| Size / Technology | 4x 1 Gb (512 MB) DRAM |
| Non-volatile? | No |
| User accessible? | Yes |
| Location in instrument | Control & Processing board |
| Written by | Normal acquisition operations |
| Sanitization method | Cycle power |

Memory Clearing, Sanitization and/or Removal Procedures

This section explains how to clear, sanitize, and remove memory from your instrument for any non-volatile memory location that can be written to during normal operation.

Volatile Memories

The volatile memory in the instrument does not retain any information when power is removed from the instrument. Therefore sanitization may be achieved by removal of the instrument power.

Non User-accessible Memories

Since these locations may only be programmed by Agilent Technologies in the factory, they cannot contain any user or acquisition data. It is therefore not necessary to perform any sanitization on these areas.

Non-volatile, User-accessible Memories

There are no non-volatile, user-accessible memories on the instrument.

The only data which may be written to non-volatile memories in the field is instrument firmware or options. The utility which performs this function in the field ('AcqEEPROMProg') ensures that only valid firmware or options files which have been generated by Agilent Technologies may be written to these locations. Therefore it is not possible for these locations to contain user information or data.

References

- 1 **DoD 5220.22-M, "National Industrial Security Program Operating Manual (NISPOM)"** United States Department of Defense. Revised February 28, 2006. May be downloaded in Acrobat (PDF) format from:
www.dss.mil/isp/fac_clear/download_nispom.html
- 2 **ODAA Process Guide for C&A of Classified Systems under NISPOM**
Defense Security Service. DSS-cleared industries may request a copy of this document via email, by following the instructions at: <http://www.dss.mil/isp/odaa/request.html>



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The four-sided geometric symbol that appears in Agilent modular product literature is called a tangram. The goal of this seven-piece puzzle is to create shapes—from simple to complex. As with a tangram, the possibilities may seem infinite as you begin to create a new test system. With a set of clearly defined elements—hardware, software—Agilent can help you create the system you need, from simple to complex.



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