

**IS215ACLAH#A# CARD MODULE**  
**IS215ACLIH#A# CARD MODULE**  
**TEST INSTRUCTIONS**

### 9.1 SCOPE

This document describes tests for IS215ACL#H#A#.

The **IS215ACL#H#A# card supplier** (SBS) will need to update file "REVISIONS.TXT" whenever the revision level is changed per an Engineering Change Notice (ECN). The ID PROM must be kept up-to-date by keeping the file contents up-to-date: "C:\JOBS\ACLI\REVISION.TXT" file up-to-date:

REVISION.TXT contents   IS215ACLAH1Ax  
                          IS215ACLAH2Ax  
                          IS215ACLIH1Ax  
                          IS215ACLIH2Ax

where x is the revision letter that changes the most.

The following example bumps IS215ACLAH1AB to a IS215ACLAH1AC in the ID PROM.

IS215ACLAH1AC  
IS215ACLAH2AA

Another example bumps IS215ACLAH2A\* to a IS215ACLAH2AB in the ID PROM.

IS215ACLAH1AC  
IS215ACLAH2AB

This will automatically bump the revision in the ID PROM of an older card.

If the revision should not be bumped **DO NOT complete the ID PROM** programming portion of the test. Press F10 to abort test at that point. The ID Prom programming only verifies the ID PROM data if the data is correct.

### 9.2 DOCUMENTATION

1. Elementary drawing for IS215ACLAH#A/IS215ACLIH#A is supplier generated.
2. Assembly drawing for IS215ACLAH#A#/IS215ACLIH#A is supplied by GE Salem engineering.
3. BOM for IS215ACLAH#A# /IS215ACLIH#A is supplier generated.
4. ACLA\_ATE Test Station - (Fixture Drawing: 336A4505)  
  Vasalf08misge\Gedsv1\Projects\Testdev\Ti\_man\Is215\Utils\Acla\_ate\Fixture  
  \acla\_fix.skd
5. Test Instructions Vasalf08misge\Gedsv1\Projects\Testdev\Ti\_man\Is215\Aclah#a  
  \215acla.doc
6. Test-specific Computer programs:  
  Vasalf08misge\Gedsv1\Projects\Testdev\Ti\_man\Is215\Utils\acla\_ate\\*.\*  
  Note: Complete Test Station backup floppy disks.

### 9.3 WORKSTATION EQUIPMENT

1. IBM 386 Compatible PC & 16550 UART with test programs installed. REL16 PC card (I/O address 3A6) Intellicon8 Z80 comport PC card.
2. ETHERNET card (10BaseT), FTP & Network software.

3. IS215ACLAH#A Test Fixture. (see drawing ACLA\_FIX.SKD Note: AUTOSKETCH drawing)

#### 9.4 TEST SET-UP

1. Test set-up is in program instructions and fixture drawings.

#### 9.5 IS215ACLAH1A/IS215ACLAH1A TEST INSTRUCTIONS

1. After the ACLA\_ATE Test Station computer is turned on (or reset) the following menu selection should appear on the Test Station CRT:  
Also, you can bring up the menu from the C:> prompt by typing "menu"<cr> (MENU.BAT) or "test"<cr> from C:>\JOBS\ACLI.

```
***** TEST MENU *****  
IS215ACLAH1A# TEST      1  
IS215ACLAH1A# TEST      2  
IS215ACLAH1A# TEST      3  
IS215ACLAH1A# TEST      4
```

Make menu selections until desired test or procedure is selected: .

2. Select "SBS TEST PROCEDURE" from the MENU and follow program instructions.
3. Select "IS215ACLAH1A# TEST" from the MENU and follow program instructions

#### 9.6 TESTS REVIEWED

F10 may be pressed any time to abort any test except FLASH programming.  
We prefer the technician to use only selections 1, 2 & 4.

##### 9.6.1 SBS TEST PROCEDURE REVIEWED

In order to boot the Unit Under Test (UUT) from a hard drive on IS215ACLAH1A the BIOS must be set-up for the hard drive. This selection guides the technician through the ACLA configuration procedure and start up tests.

##### 9.6.2 IS215ACLAH1A# TEST REVIEWED

This is the do all selection (after SBS TEST).

##### 9.6.3 FLASH LOAD REVIEWED

This portion of the test programs the FLASH chip (U518). Data is send from the Test Station Computer COM1 to the UUT COM1 at 115200 bits per second. The UUT must almost be fully functional before FLASH load can be completed successfully. Before any other tests are executed, (DUAL PORTED RAM TEST, NVRAM TEST, ETHERNET TEST, and STATUS LED TEST) the FLASH load must be completed successfully and UUT boot checks are OK.

#### 9.6.4 DUAL PORTED RAM TEST REVIEWED

The ACLA uP tests it's side and the IS200DSPXH1A# (inside fixture) tests it's side of the dual ported ram. On error, Address, Expected and Read values are displayed.

#### 9.6.5 NON-VOLATILE RAM TEST REVIEWED

The ACLA uP tests the NVRAM and then leaves a known pattern in it. The UUT is power down for about 5 seconds, powered back up. The NVRAM is tested for the known pattern. On error, Address, Expected and Read values are displayed.

#### 9.6.4 ETHERNET COMMUNICATIONS TEST REVIEWED

The processor BIOS should configured the ethernet chip for proper operation (port address, IRQ, etc.). Whenever "ftp x.xx.xx.xx < ftp2uc2k.cmd > ftp2uc2k.log" appears on the test station CRT, Hundreds of Kbytes of data is transmitted to and the from to test station computer and the ethernet circuit is being exercised. The test station computer compares transmitted and received data.

#### 9.6.5 WATCHDOG TEST

The "OK" lights when the watchdog circuit is being exercised. U514 is the controller for the LED's. We have seen this fail from time to time but passes the second time. This test will also fail if the program has been removed from flash. If so, run "ALL TESTS AFTER FLASH LOAD" selection.

#### 9.6.6 STATUS, ACTIVE & OK LED TESTS

The "ACTIVE" should be lit when ever power is on. The "STATUS" LED's rotate in a CCW pattern then activated. The "OK" lights when the watchdog circuit is being excised. U514 is the controller for the LED's. This selection may not work if some previous tests have passed because the program has been removed from FLASH. We prefer the technician to use only selections 1, 2 & 4.

#### 9.6.7 PROGRAM ID PROM

This selection allows the technician to select the UUT revision manually for correct

ID PROM programming, but this is done automatically at the end of the test. The **IS215ACLAH#A# card supplier** (SBS) will need to update file "REVISIONS.TXT" whenever the revision level is changed per an Engineering Change Notice (ECN). "C:\JOBS\ACLA\REVISION.TXT" file up-to-date:

REVISION.TXT contents   IS215ACLAH1Ax  
                          IS215ACLAH2Ax  
                          IS215ACLIH1Ax  
                          IS215ACLIH2Ax

where x is the revision letter that changes the most.

#### 9.6.8 PROGRAM ID PROM cont.

The following example bumps IS215ACLAH1AB to a IS215ACLAH1AC in the ID PROM.  
IS215ACLAH1AC  
IS215ACLAH2AA

Another example bumps IS215ACLAH2A\* to a IS215ACLAH2AB in the ID PROM.  
IS215ACLAH1AC  
IS215ACLAH2AB

This will automatically bump the revision in the ID PROM of an older card.  
If the revision should not be bumped **DO NOT complete the ID PROM** programming  
portion  
of the test. Press F10 to abort test at that point. The ID Prom programming only  
verifies the ID PROM data if the data is correct.

#### 9.6.9 TERMINAL EMULATOR

This is a tool use to communicate with the ACLA / ACLI manually.

REV	INIT	DESCRIPTION OF CHANGE	DATE COMPLETED
001	RLT	First Made For IS215ACLAH1AA	Feb 12, 1998
002	RLT	Added IS215ACLIH1A#	July 30, 1998
003	RLT	Moved Documentation to Vasalf08misge	Feb 10, 1999
004	RLT	Tweaked section 9.5 after adding burn-in test	March 23, 1999