

To PAWS ATLAS Users
From TYX Corporation
Subject ATLAS Release 201002XX (3.24.24)
Date XX, February 2010

1.0 Overview

The following describes an overview of changes included within version 201002XX (3.24.24) of the following 1985 ATLAS based compiler and Lex files.

CASS / PC

and version 201002XX (3.24.24) of the following ATLAS support tools:

ATLAS Linker
ATLAS Flow
ATLAS Switch

1.1 Enhancements

Added a 'P' option to support the Profiler utility.

1.2 Issues

.LU processing problems.
PCCASS Issue 1.2.2 – Entry point processing.
PCCASS Issue 1.4.1 – APPLY SHORT with multiple pins.
PCCASS Issue 1.4.3 – UUT pin name LO/VCXO-SA.
PCCASS Issue 1.4.6 – Compiler processing of certain <uut-pin> names.
PCCASS Issue 1.5.1 – SHIFT-LEFT compiler error.
PCCASS Issue 1.15.8-9 – WAVE-LENGTH with a descriptor dimension.
PCCASS Issue 1.22.1 – Multi-use of label for MODULE and Variable.
PCCASS Issue 3.1.3-6 – NOMinal evaluation field processing.
PCCASS Issue 6.1-2 – EO3 issues.

2.0 Detailed Description

2.1 Enhancements

2.1.1 'P' option added.

A 'P' option was added to the compiler to support the Profiler utility. The Profiler is the only valid use of this option.

2.2 Issues

2.2.1 Issue with compiling the .LU files that contain certain <uut pin>/<port> names.

An error occurred during the compilation of the .LU file (ITA processing), when the <uut pin> name was identical to a system port name "ATMOSPHERE".

2.2.2 PCCASS Issue 1.2.2 – Entry point processing.

PCCASS Issue 1.2.1 modified the PCCASS entry point processing to allow a statement number to be specified on the E flagged (e.g. comment/E-Message) statement. The other CASS dialects, (as currently implemented), used the next statement's number as the entry point. PCCASS Issue 1.2.2, indicated the need for either method to be used. I.E. the statement number on the E flagged statement was optional.

2.2.3 PCCASS Issue 1.4.1 – APPLY SHORT with multiple pins.

The compiler did not allow multiple pins to be specified after the HI or LO port names. The compiler was enhanced to allow multiple connections for the HI and LO ports. Example:

ATLAS:

```
50 APPLY, SHORT, CNX HI HVL-K4 HVL-K5 HVL-K6 LO HVL-GND $
```

LU:

```
SHORTHIVHL-K4          N1J10-39C
SHORTHIVHL-K5          N1J10-40C
SHORTHIVHL-K6          N1J10-41C
SHORTLOHVL-GND         NONE
```

Switch closures:

```
source short
  CNX
    from
      _LO_          _HI_          _HI_          _HI_
    to
      HVL-GND       HVL-K6         HVL-K5         HVL-K4
N1J10-141 -> N1J10-341 BLK    1 MOD    10 PTH   271 (Switch  27:2:0)
N1J10-140 -> N1J10-340 BLK    1 MOD    10 PTH   261 (Switch  26:2:0)
N1J10-139 -> N1J10-339 BLK    1 MOD    10 PTH   251 (Switch  25:2:0)
```

2.2.4 PCCASS Issue 1.4.3 – UUT pin name LO/VCXO-SA.

An error occurred during the compilation of the ATLAS code that used a <uut pin> name that started with a valid <port> name followed by a special character (e.g. '/').

2.2.5 PCCASS Issue 1.4.6 – UUT pin name REFHI-S1.

An error occurred during the compilation of the ATLAS code that used a <uut pin> name that started with the CNX field keyword <REF> (e.g. REFHI-S1).

2.2.6 PCCASS Issue 1.5.1 – SHIFT-LEFT compiler error.

An error occurred during the compilation of the ATLAS code that had a CALCULATE statement using SHIFT-LEFT. The actual problem is the hierarchical order of the expression processing was not as specified in the IEEE716-85 (i.e. TOOK by reference). The compiler was corrected to use the specified hierarchical order.

2.2.7 PCCASS Issue 1.15.8-9 – WAVE-LENGTH with a descriptor dimension.

The WAVE-LENGTH modifier with a descriptor dimension (e.g. W3TO5) for the INFRARED noun was not recognized. The WAVE-LENGTH modifier was added to the list of legal modifiers for this noun.

2.2.8 PCCASS Issue 1.22.1 – Multi-use of label for MODULE and Variable.

The compiler now has the capability of allowing the MODULE name and variable labels to be the same.

2.2.9 PCCASS Issue 3.1.3-6 – NOMinal evaluation field processing.

An error occurred during the processing of the NOMinal component of the <evaluation> field.

2.2.10 PCCASS Issue 6.1-2 – EO3 issues.

Several EO3 issues: 6.1.1 AFTER Clause; 6.2.1 PIXEL-REPLACEMENT; 6.3.1 CIRCULATE RANGE 0 TIMES...; and several LexFile issues reported by NGC. The AFTER clause processing was resolved by the compiler. The others were resolved by the LexFiles.