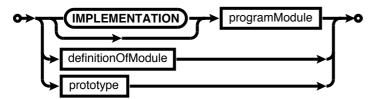
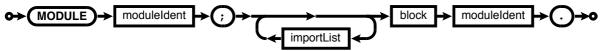
# **Appendix B: Syntax Diagrams**

# **B.1 Non-Terminal Symbols**

#### **#1 Compilation Unit**



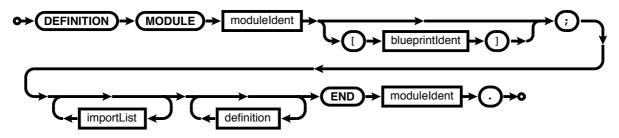
#### #2 Program Module



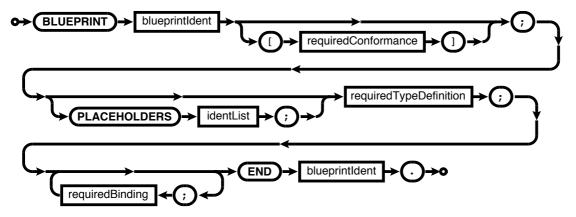
#### #2.1 Module Identifier



#### **#3 Definition Of Module**



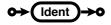
# #4 Blueprint



# #4.1 Blueprint Identifier

**#4.2 Required Conformance** 

#4.3 Required Binding



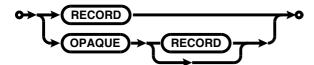
**→** blueprintIdent →

◆ procedureHeader →

# **#5 Required Type Definition**



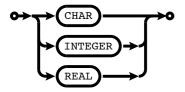
# **#6 Permitted Type Definition**



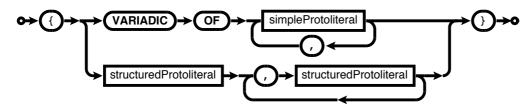
# #7 Proto-Literal



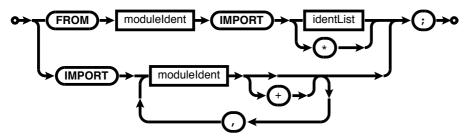
# **#7.1 Simple Proto-Literal**



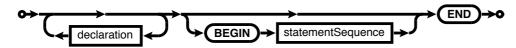
# **#8 Structured Proto-Literal**



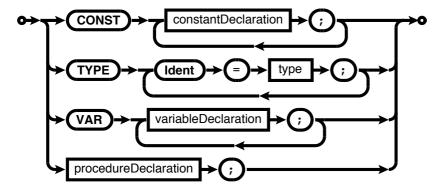
# **#9 Import List**



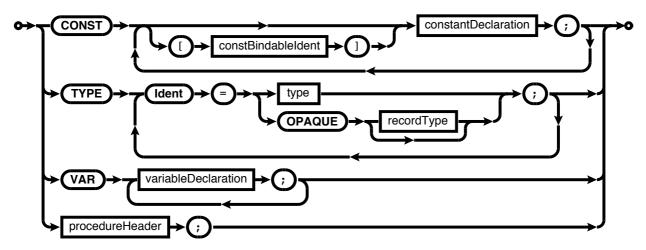
# #10 Block



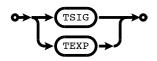
# #11 Declaration



# **#12 Definition**

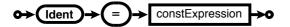


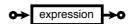
#### #12.1 CONST Bindable Identifier



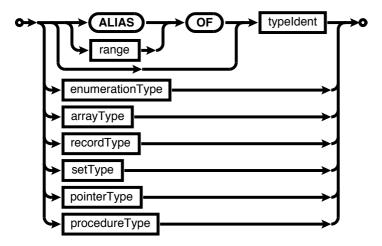
#### **#13 Constant Declaration**

# **#13.1 Constant Expression**





# #14 Type



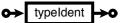
# #15 Range



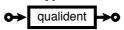
# **#16 Enumeration Type**



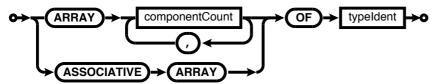
# #16.1 Enumeration Base Type



# #16.2 Type Identifier



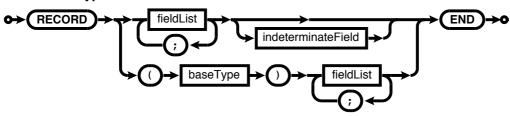
# #17 Array Type



# **#17.1 Component Count**



# **#18 Record Type**



#### #18.1 Field List



# #18.2 Base Type typeIdent

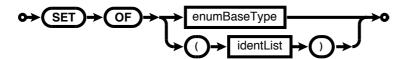
# #19 Indeterminate Field



#### #19.1 Discriminant Field



# #20 Set Type



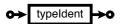
#### **#21 Pointer Type**



# **#22 Procedure Type**



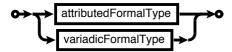
# #22.1 Returned Type



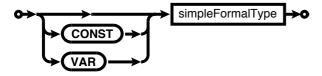
# **#23 Formal Type List**



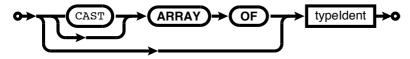
# #24 Formal Type



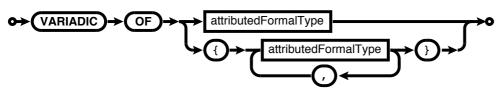
# **#25 Attributed Formal Type**



# #26 Simple Formal Type



# #27 Variadic Formal Type



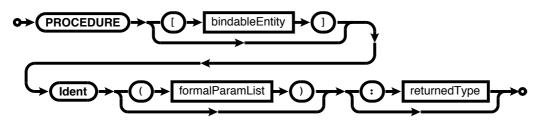
#### #28 Variable Declaration



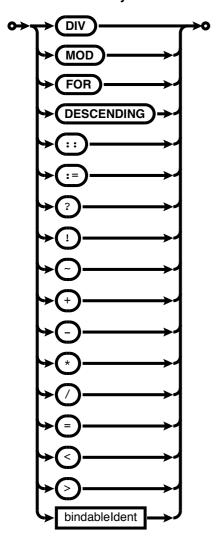
#### **#29 Procedure Declaration**



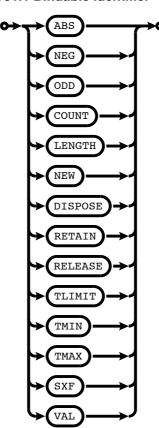
# #30 Procedure Header



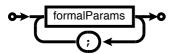
# #31 Bindable Entity



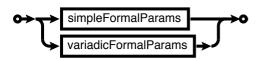
# #31.1 Bindable Identifier



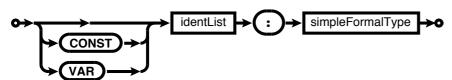
# **#32 Formal Parameter List**



# #33 Formal Parameters



# **#34 Simple Formal Parameters**



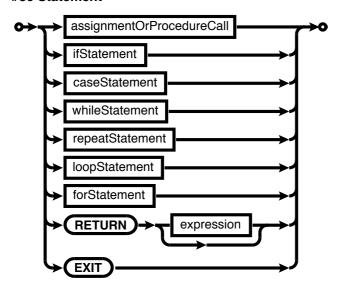
# **#35 Variadic Formal Parameters**

# VARIADIC variadicTerminator of simpleFormalType simpleFormalParams }

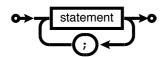
# #35.1 Variadic Terminator



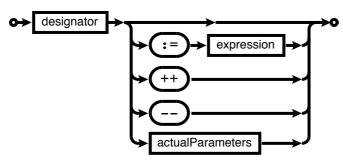
# #36 Statement



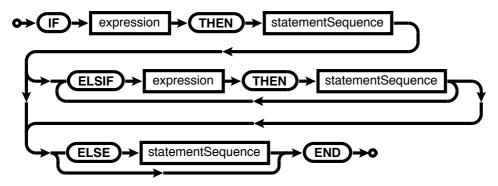
# #37 StatementSequence



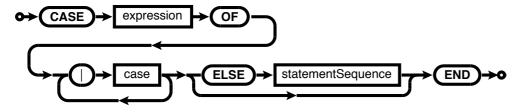
# #38 Assignment Or Procedure Call



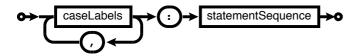
# #39 IF Statement



#### #40 CASE Statement



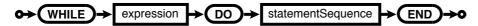
# #41 Case



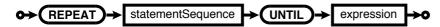
#### #42 Case Labels



# **#43 WHILE Statement**



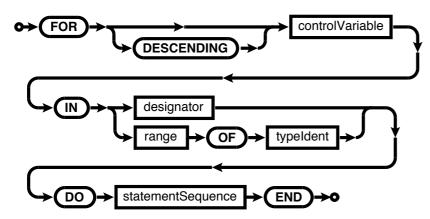
#### **#44 REPEAT Statement**



#### #45 LOOP Statement



# #46 FOR Statement



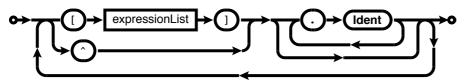
#### #46.1 Control Variable



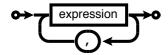
# #47 Designator



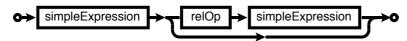
# #48 Designator Tail



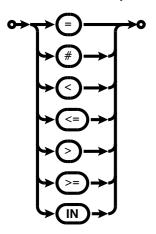
# **#49 Expression List**



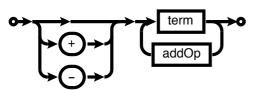
# **#50 Expression**



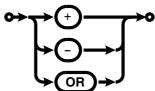
# #50.1 Relational Operator



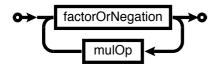
# **#51 Simple Expression**



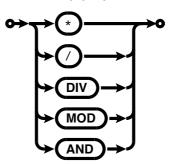
# #51.1 Add Operator



#52 Term



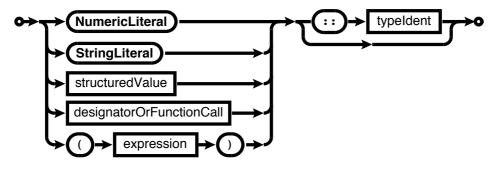
**#52.1 Multiply Operator** 



# **#53 Factor Or Negation**



#### #54 Factor



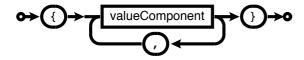
# **#55 Designator Or Function Call**



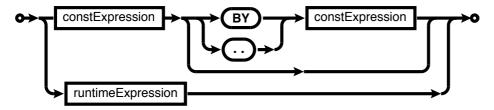
#### **#56 Actual Parameters**



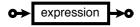
# **#57 Structured Value**



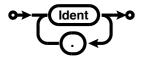
# **#58 Value Component**



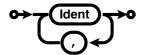
# **#58.1 Runtime Expression**



# #59 Qualified Identifier

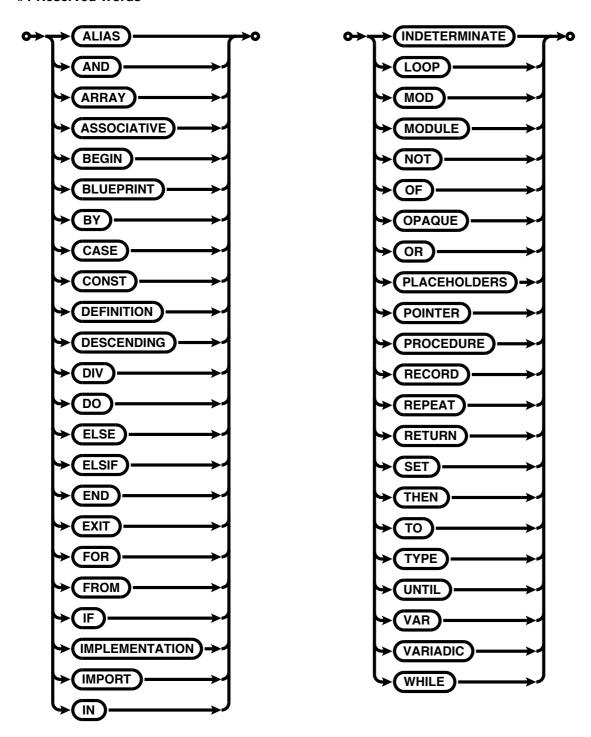


# #60 Identifier List

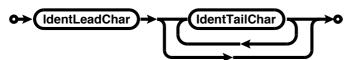


# **B.2 Terminal Symbols**

#### **#1 Reserved Words**

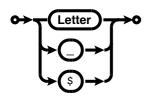


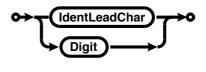
# #2 Identifier



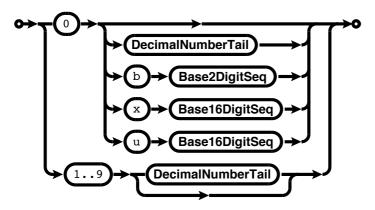
# #2.1 Identifier Leading Character



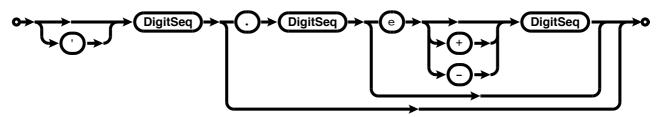




# **#3 Numeric Literal**



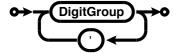
#### #3.1 Decimal Number Tail



#3.2 Digit Sequence



#3.2b Digit Group



#3.3 Base-2 Digit Sequence #3.3b Base-2 Digit Group



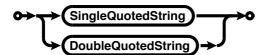


#3.4b Base-16 Digit Group

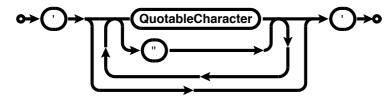
#3.4 Base-16 Digit Sequence



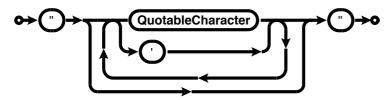
# #4 String Literal



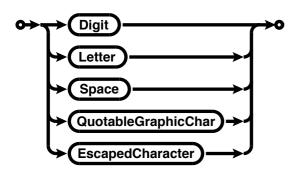
# **#4.1 Single Quoted String**



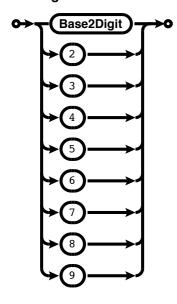
#### #4.2 Double Quoted String



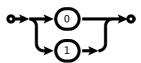
#### #4.3 Quotable Character



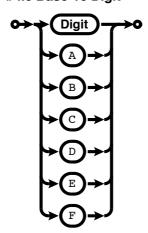
#4.4 Digit



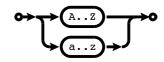
#4.5 Base-2 Digit



#4.6 Base-16 Digit



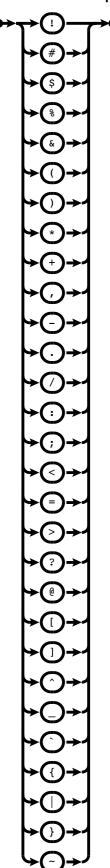
#4.7 Letter



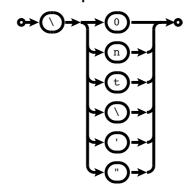
#4.8 Space

CONST Space = CHR(32)

#4.9 Quotable Graphic Character



#4.10 Escaped Character



# Status: January 15, 2013

# **B.3 Ignore Symbols**

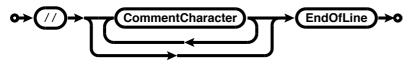
# **#1 Whitespace**



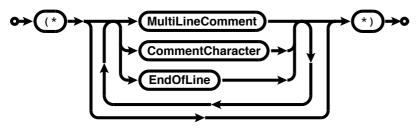
#### **#1.1 ASCII Tabulator**

CONST ASCII\_TAB = CHR(8)

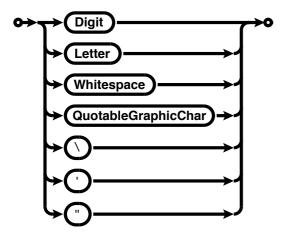
# **#2 Single-line Comment**



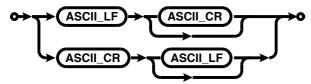
# **#3 Multi-line Comment**



# #3.1 Comment Character



# #4 End Of Line Marker



#### #4.1 ASCII Line Feed

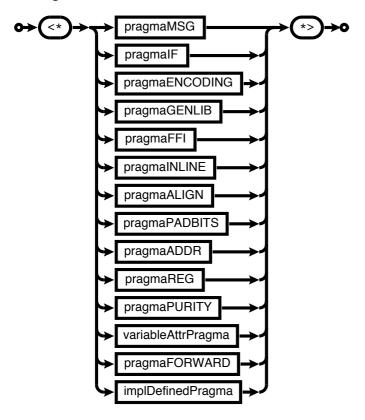
CONST ASCII LF = CHR(10)

# #4.2 ASCII Carriage Return

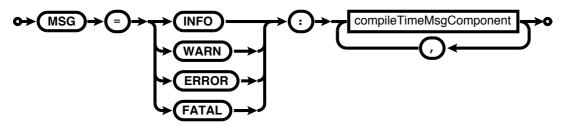
CONST ASCII\_CR = CHR(13)

# **B.4 Pragma Grammar**

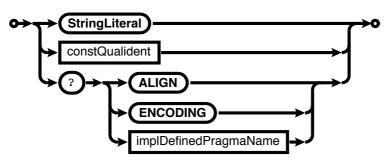
#### #1 Pragma



# #2 Body Of Compile Time Message Pragma

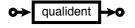


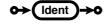
# **#3 Compile Time Message Component**



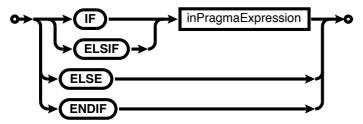
#3.1 Constant Qualified Identifier

#3.2 Implementation Defined Pragma Name

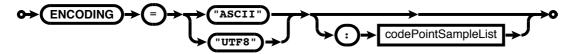




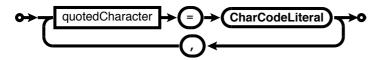
#### #4 Body Of Conditional Compilation Pragma



# **#5 Body Of Character Encoding Pragma**

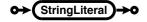


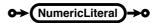
# #6 Code Point Sample List



#### #6.1 Quoted Character

#6.2 Character Code Literal

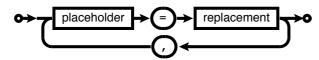




# **#7 Body Of Library Template Expansion Pragma**

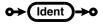


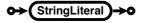
#### **#8 Template Parameter List**



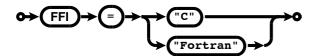
#### #8.1 Placeholder

#### #8.2 Replacement





# #9 Body Of Foreign Function Interface Pragma



# #10 Body Of Procedure Inlining Pragma



# #11 Body Of Memory Alignment Pragma



#### #12 Body Of Bit Padding Pragma



# #13 Body Of Memory Mapping Pragma



#### #14 Body Of Register Mapping Pragma



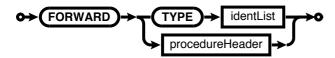
# **#15 Body Of Purity Attribute Pragma**



#### #16 Body Of Variable Attribute Pragma



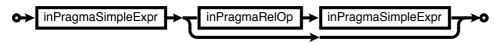
# #17 Body Of Forward Declaration Pragma



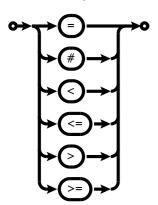
#### #18 Body Of Implementation Defined Pragma



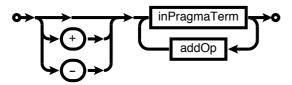
#### #19 In-Pragma Expression



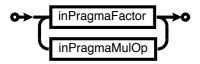
#### #19.1 In-Pragma Relational Operator



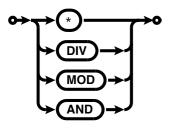
# #20 In-Pragma Simple Expression



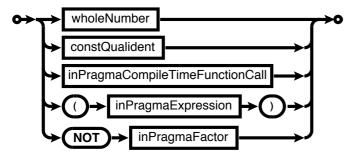
# #21 In-Pragma Term



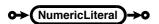
# #21.1 In-Pragma Multiply Operator



# #22 In-Pragma Factor



#### #22.1 Whole Number



# #23 In-Pragma Compile-Time Function Call

