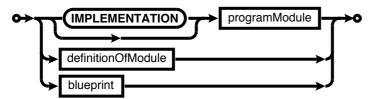
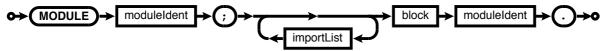
## **Appendix B: Syntax Diagrams**

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

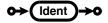
### **#1 Compilation Unit**



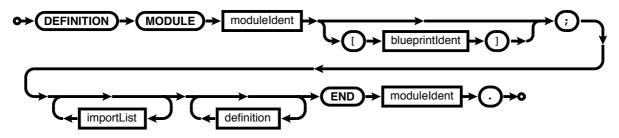
#### #2 Program Module



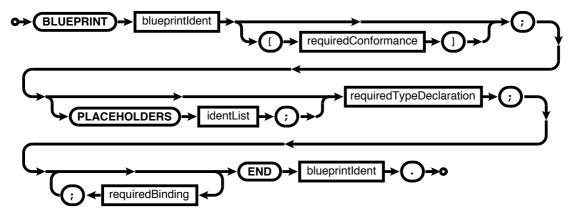
#2.1 Module Identifier



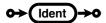
#### **#3 Definition Of Module**



## #4 Blueprint



## #4.1 Blueprint Identifier



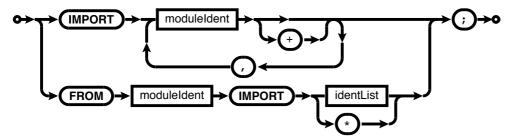
### **#4.2 Required Conformance**



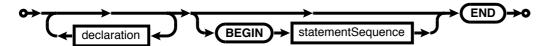
## #4.3 Required Binding



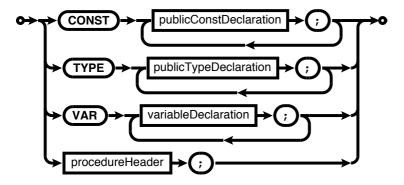
#### **#5 Import List**



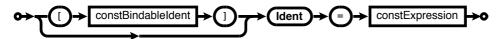
## #6 Block



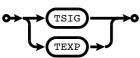
## **#7 Definition**



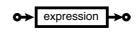
#### **#8 Public Constant Declaration**



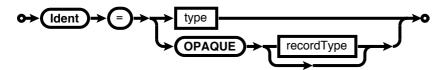
## **#8.1 CONST Bindable Identifier**



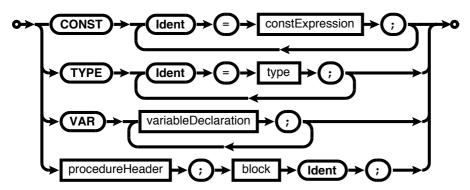
## #8.2 Constant Expression



## **#9 Public Type Declaration**

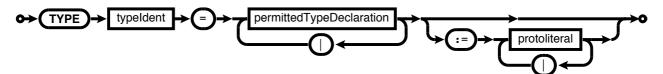


#### #10 Declaration

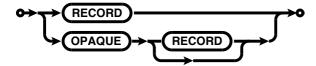


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## **#11 Required Type Declaration**



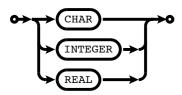
## **#12 Permitted Type Declaration**



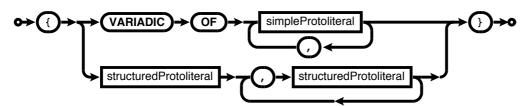
#### #13 Proto-Literal



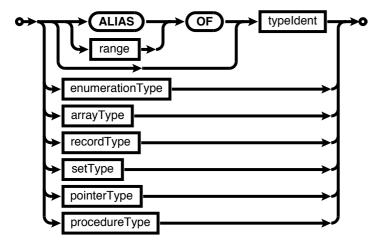
## #13.1 Simple Proto-Literal



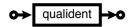
#### **#14 Structured Proto-Literal**



## #15 Type



## #15.1 Type Identifier



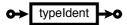
#### #16 Range



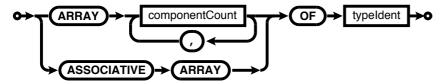
## **#17 Enumeration Type**



## #17.1 Enumeration Base Type



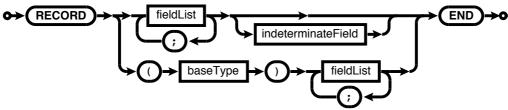
## #18 Array Type



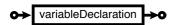
## **#18.1 Component Count**



## #19 Record Type



### #19.1 Field List



### #19.2 Base Type



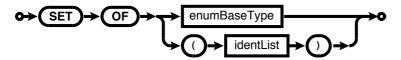
#### #20 Indeterminate Field



## #20.1 Discriminant Field Identifier



### #21 Set Type



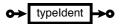
## **#22 Pointer Type**



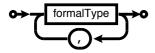
## **#23 Procedure Type**



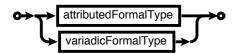
## #23.1 Returned Type



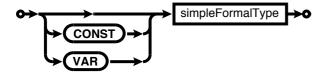
## #24 Formal Type List



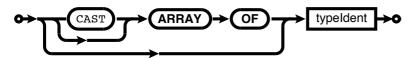
## #25 Formal Type



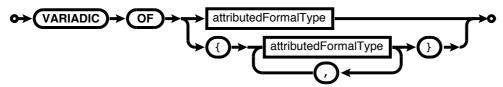
## #26 Attributed Formal Type



## #27 Simple Formal Type



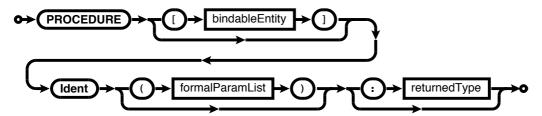
## #28 Variadic Formal Type



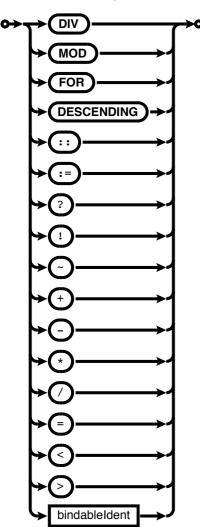
### #29 Variable Declaration



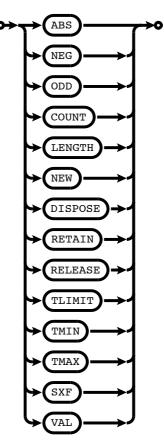
#### #30 Procedure Header



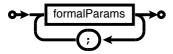
#31 Bindable Entity



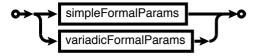
#31.1 Bindable Identifier



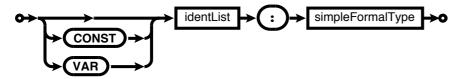
#32 Formal Parameter List



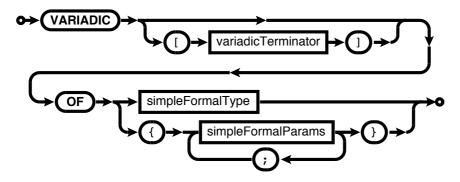
## **#33 Formal Parameters**



## **#34 Simple Formal Parameters**



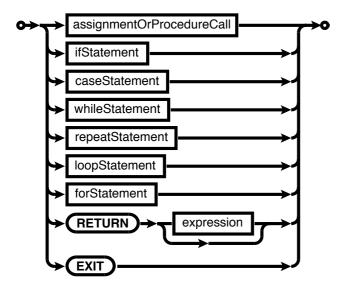
## **#35 Variadic Formal Parameters**



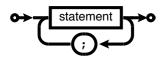
## #35.1 Variadic Terminator



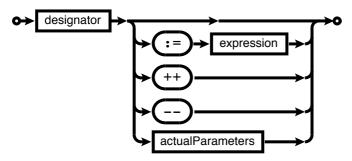
## #36 Statement



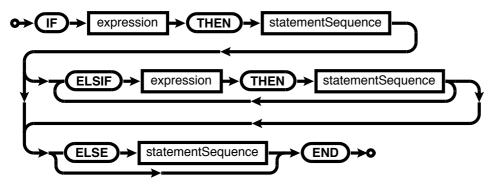
## #37 StatementSequence



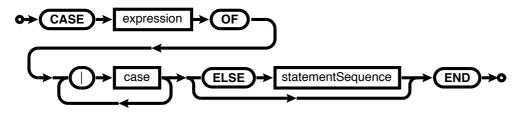
#### **#38 Assignment Or Procedure Call**



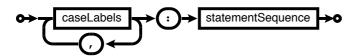
#### #39 IF Statement



#### #40 CASE Statement



#### #41 Case



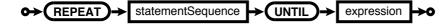
#### #42 Case Labels



## **#43 WHILE Statement**



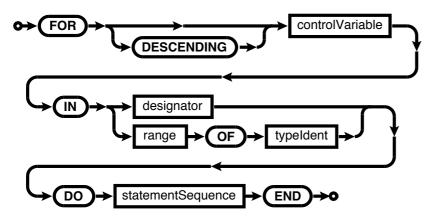
#### **#44 REPEAT Statement**



#### #45 LOOP Statement



## #46 FOR Statement



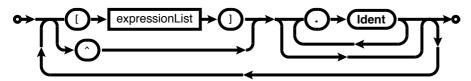
## #46.1 Control Variable



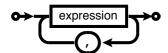
## #47 Designator



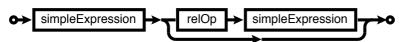
## #48 Designator Tail



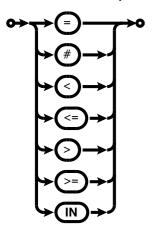
## **#49 Expression List**



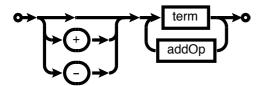
## #50 Expression



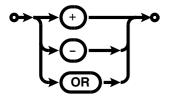
## #50.1 Relational Operator



## **#51 Simple Expression**



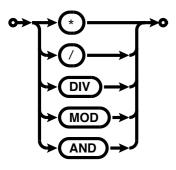
## #51.1 Add Operator



## #52 Term



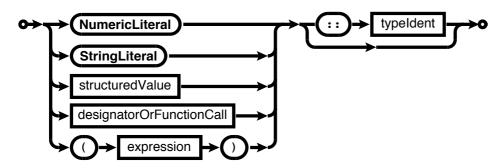
## **#52.1 Multiply Operator**



## **#53 Factor Or Negation**



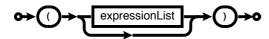
## #54 Factor



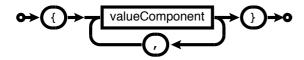
## **#55 Designator Or Function Call**



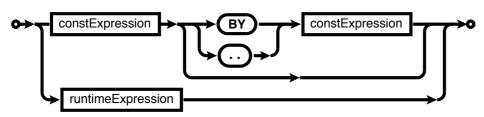
## **#56 Actual Parameters**



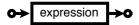
#### **#57 Structured Value**



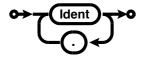
## **#58 Value Component**



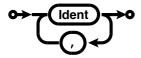
## **#58.1 Runtime Expression**



## **#59 Qualified Identifier**

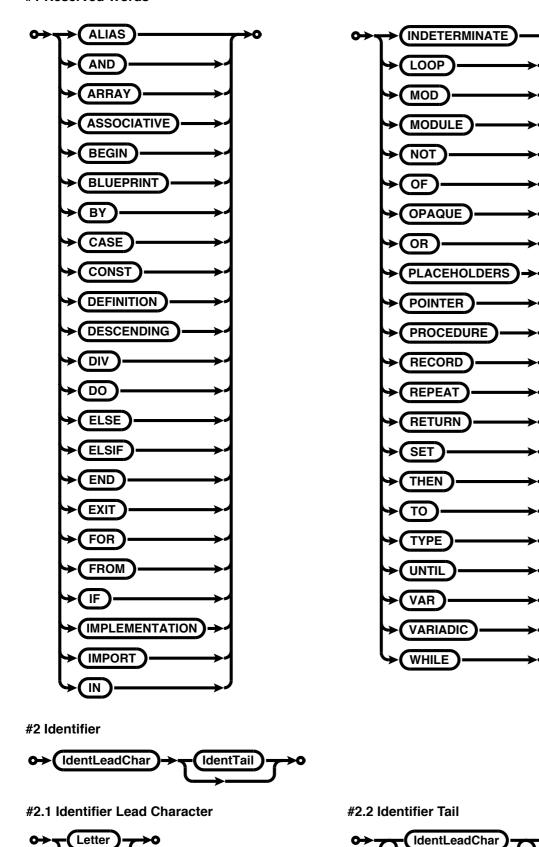


## #60 Identifier List



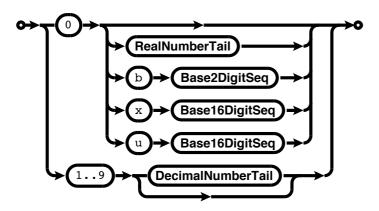
## **B.2 Terminal Symbols**

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

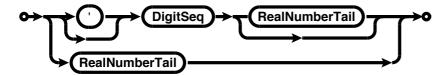


Digit

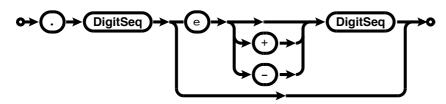
## **#3 Numeric Literal**



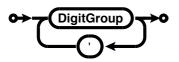
## #3.1 Decimal Number Tail



## #3.2 Real Number Tail



#3.3 Digit Sequence



#3.4 Base-2 Digit Sequence



#3.5 Base-16 Digit Sequence



#3.3b Digit Group

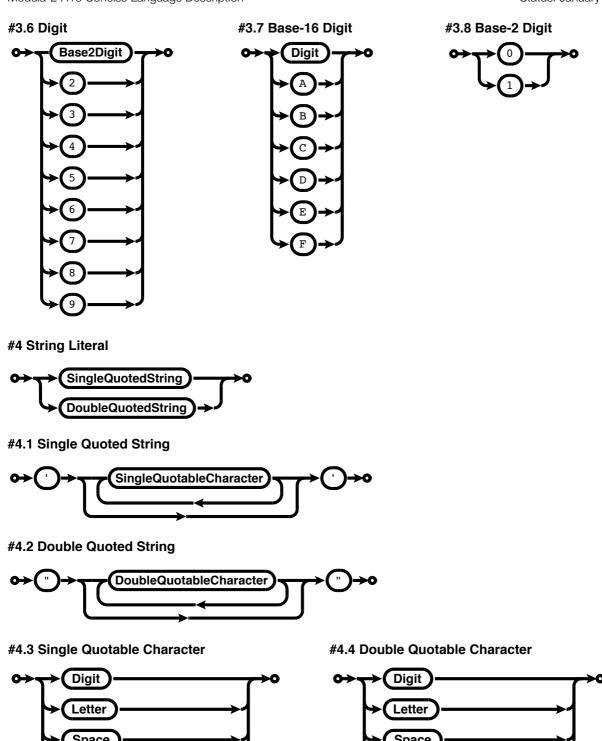


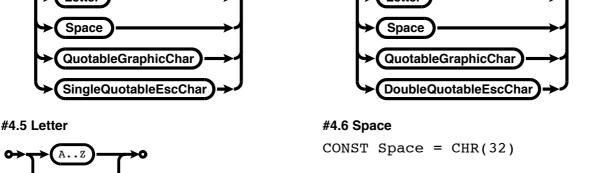
#3.4b Base-2 Digit Group



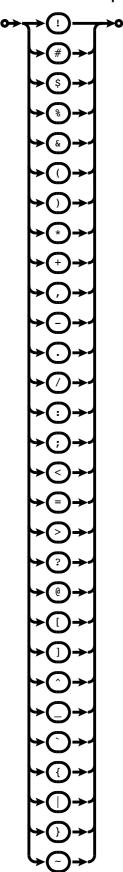
#3.5b Base-16 Digit Group



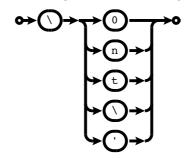




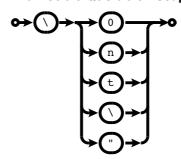
# #4.7 Quotable Graphic Character



## **#4.8 Single Quotable Escaped Character**



## **#4.9 Double Quotable Escaped Character**



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## **B.3 Ignore Symbols**

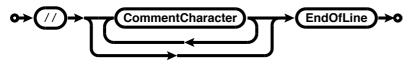
## **#1 Whitespace**



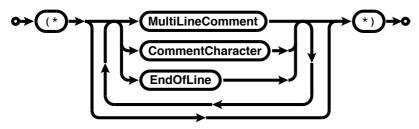
## **#1.1 ASCII Tabulator**

CONST ASCII\_TAB = CHR(8)

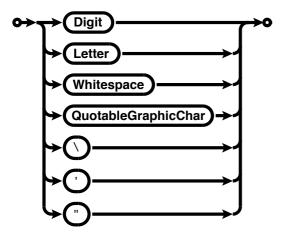
## **#2 Single-line Comment**



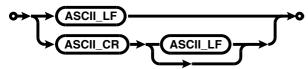
## **#3 Multi-line Comment**



#### #3.1 Comment Character



#### #4 End Of Line Marker



## #4.1 ASCII Line Feed

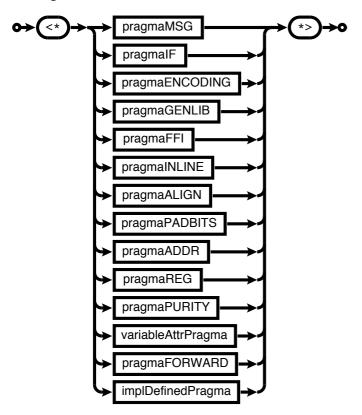
CONST ASCII\_LF = CHR(10)

## #4.2 ASCII Carriage Return

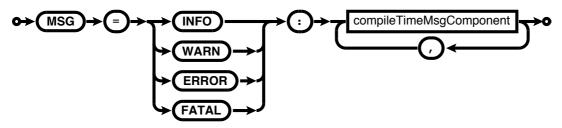
CONST ASCII\_CR = CHR(13)

## **B.4 Pragma Grammar**

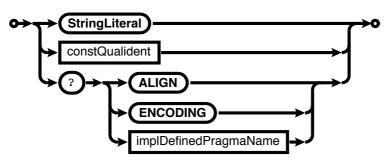
#### #1 Pragma



## #2 Body Of Compile Time Message Pragma

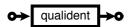


## **#3 Compile Time Message Component**



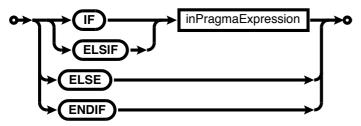
#3.1 Constant Qualified Identifier

#3.2 Implementation Defined Pragma Name

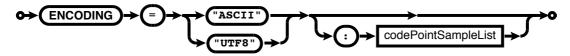




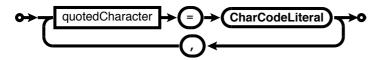
#### #4 Body Of Conditional Compilation Pragma



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

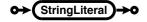


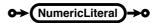
## #6 Code Point Sample List



#### #6.1 Quoted Character

#### #6.2 Character Code Literal

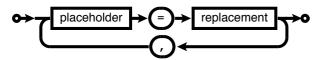




## **#7 Body Of Library Template Expansion Pragma**



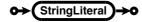
#### **#8 Template Parameter List**



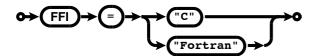
#### #8.1 Placeholder

### #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



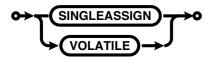
### **#14 Body Of Register Mapping Pragma**



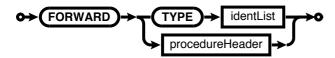
## **#15 Body Of Purity Attribute Pragma**



#### #16 Body Of Variable Attribute Pragma



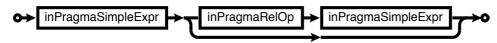
## #17 Body Of Forward Declaration Pragma



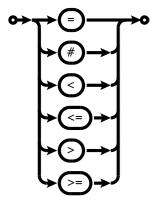
#### #18 Body Of Implementation Defined Pragma



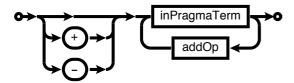
### #19 In-Pragma Expression



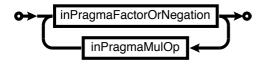
#### #19.1 In-Pragma Relational Operator



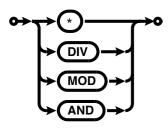
## #20 In-Pragma Simple Expression



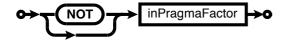
## #21 In-Pragma Term



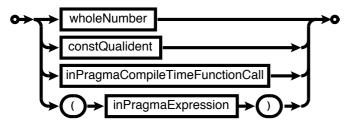
## #21.1 In-Pragma Multiply Operator



## #22 In-Pragma Factor Or Negation



## #23 In-Pragma Factor



#### #23.1 Whole Number



## #24 In-Pragma Compile-Time Function Call

