

APPENDIX H : OBJECT CODE FORMAT

When ADRMOD = 2 is specified in the OPTNS directive, the data-item, data-set, formal parameter, literal, picture, keytable and format references are extended with one byte. The layout of the object code is then different from the one-byte representation.

REFERENCE TYPE	OBJECT CODE FORMAT														
	ADRMOD = 1			ADRMOD = 2											
Data-Item or ARRAY	0	3	4	7	0	3	4	7	0	7					
	b			l			0			b			l		
ARRAY used in PERF/PLIST parameter list	0	3	4	7	0	3	4	7	0	7					
	b			l			1			b			l		
Boolean data item	0	3	4	7	0	3	4	7	0	7					
	b			l			9			b			l		
<p>b is the workblock index, ranging from X'11' to X'F'</p> <p>l is the data item index, ranging from X'0' to X'F'</p> <p>(ADRMOD = 1) or from X'00' to X'FF' (ADRMOD = 2).</p> <p>For boolean data items l is in the range from X'0' to X'F' in both addressing modes.</p>															
LITERAL constant	0	7	0	3	4	7	0	7	0	7					
	l			4			10-3			14-11					
<p>l is the literal index, ranging from X'10' to X'FF' (ADRMOD = 1) or from X'100' to X'FFF' (ADRMOD = 2).</p>															

OBJECT CODE FORMAT	
REFERENCE TYPE	<div style="display: flex; justify-content: space-around;"> ADRMOD=1 ADRMOD=2 </div>
Key table	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>0 7</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">I</div> </div> <div style="text-align: center;"> <p>0 3 4 7 0 7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">5</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">10-3</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;">14-11</div> </div> </div> </div> <p>I is the key table index, ranging from X'10' to X'FF' (ADRMOD=1) or from X'100' to X'FFF' (ADRMOD=2).</p>
Picture	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>0 7</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">I</div> </div> <div style="text-align: center;"> <p>0 3 4 7 0 7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">5</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">10-3</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;">14-11</div> </div> </div> </div> <p>I is the picture index, ranging from X'10' to X'FF' (ADRMOD=1) or from X'100' to X'FFF' (ADRMOD=2).</p>
Format list	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>0 7</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">I</div> </div> <div style="text-align: center;"> <p>0 3 4 7 0 7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">7</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">10-3</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;">14-11</div> </div> </div> </div> <p>I is the format list index, ranging from X'10' to X'FF' (ADRMOD=1) or from X'100' to X'FFF' (ADRMOD=2).</p>
Data set	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>0 1 2 3 4 7</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> I </div> </div> <div style="text-align: center;"> <p>0 3 4 5 6 7 0 7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">8</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">10-1</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;">12-9</div> </div> </div> </div> <p>I is the data set index, ranging from X'10' to X'3F' (ADRMOD=1) or from X'10' to X'3FF' (ADRMOD=2). Bits 0/1 or 4/5 are used for transfer of the wait bit and echo/exclusive access bit.</p>
Formal parameter (except for data sets)	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>0 3 4 5 6 7</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> 0 I </div> </div> <div style="text-align: center;"> <p>0 3 4 7 0 7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">0</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;">0</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;">I</div> </div> </div> </div> <p>I is the position number of the formal parameter ranging from X'0' to X'7' for both addressing modes</p>

OBJECT CODE FORMAT	
REFERENCE TYPE	ADRMOD=1 ADRMOD=2
Formal parameter (data sets)	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>0 1 2 3 4 5 6 7</p> </div> <div style="text-align: center;"> <p>0 3 4 5 6 7 0 7</p> </div> </div> <p>I is the position number of the formal parameter, ranging from X'0' to X'7' for both addressing modes. Bits 0/1 or 4/5 are used for transfer of the wait and echo/exclusive access bits.</p>
Immediate values (e.g. list length)	<div style="text-align: center;"> <p>0 7</p> </div> <p>V is a value ranging from X'00' to X'FF' (ADRMOD=1)</p>
Subroutine in PERF	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>0 7</p> </div> <div style="text-align: center;"> <p>0 7</p> </div> </div>
Subroutine in CALL	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>0 7</p> </div> <div style="text-align: center;"> <p>0 7</p> </div> </div>
Branch in branch instructions	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>0 7</p> </div> <div style="text-align: center;"> <p>0 7</p> </div> </div> <p>I is the index into the proper address table for performs, calls or branches.</p>
:FMTITEM	<p>X'0C' X'000C'</p>

