

B\$CPSL – Convert 16-bit Pointer to 32-bit Pointer

The B\$CPSL routine converts a 16-bit pointer (PIC SPT) to a 32-bit Pointer (PIC PTR).

1. Invocation

To convert a 16-bit short pointer to a 32-bit long pointer code:

```
$SET short_ptr
CALL B$CPSL
$MOVE long_ptr
```

where *short_ptr* is a PIC SPT variable and *long_ptr* is a PIC PTR variable.

2. STOP Codes and Exception Conditions

No STOP codes are generated by B\$CPSL.

No exception conditions are returned by B\$CPSL.

3. Programming Notes

B\$CPSL is reserved for internal use by GSM and Speedbase only. This routine is never coded explicitly but is generated by the compiler for some MOVE instructions.

Internally, a 32-bit PIC PTR field consists of:

```
01 long_ptr
02 PAGE PIC 9(4) COMP
02 OFFSET PIC 9(4) COMP
```

The *short_ptr* variable is moved to the OFFSET portion of the long pointer. The PAGE portion of the long pointer is set to #0001 or #0002 depending on the value of the *short_ptr* relative to the 16-bit Swap Area limit.

4. Examples

None.

5. Copy-Books

None.

6. See Also

None.