



OPERATOR INTERFACE PRODUCTS APPLICATION NOTE

Subject: Display signed numbers using OIL

AN# 1085A

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Description: An OIL routine example for displaying positive and negative numbers.

This is a stand alone routine to display signed numbers. In this example, the positive decimal number entered is intended to load register #30 as a hex value. The signed number is determine using the 2's compliment algorithm. Below is the range of signed numbers supported and the OIL instructions.

Range	Hex	Decimal
Positive number	0000H to 7FFFH	0 to 32767
Negative number	8000H to FFFFH	-32767 to -1

```
%start          ;this portion of code is intended to load a hex value
@5,0           ;for this example
tr, kb(ddddd), #30

@5,1
if #30 >= &8000 ;check for negative range
not #30        ;if negative, use 2's complement to determine negative value
add 1, #30
“-“: #30: go done ;display negative number

“ “: #30       ;display positive number
%done
@5,1
%start
```