

FA MODULE EXPONENT DIFFERENCE EXAMPLES

Hardware implementation: $(k-j)$ via $(k+\bar{j})$

$k = 40006 \longrightarrow k = 40006$

$j = 40001 \longrightarrow \text{compliment } j = \underline{37776} \text{ add}$

carry 00004

j operand exponent is smaller so retain the k operand exponent.

$k = 40001$

$k = 40001$

$j = 40006 \longrightarrow \text{compliment } j = \underline{37771} \text{ add}$

No Carry

carry 77772

j operand exponent is larger so retain the j operand exponent.