

编码:

OP(ins[31:26])	base(ins[25:21])	rt(ins[20:16])	offset(ins[15:7])	ins[6]	SWE(ins[6:0])
011111	xxxxx	xxxxx	xxxxxxxxx	0	011111

格式: swe rt, offset(base)

描述: $\text{memory}[\text{GPR}[\text{base}] + \text{offset}] \leftarrow \text{GPR}[\text{rt}]$

The contents of the 32-bit word at the memory location specified by the aligned effective address are fetched, signextended to the GPR register length if necessary, and placed in GPR rt. The **9-bit** signed offset is added to the contents of GPR base to form the effective address.

操作: $\text{Addr} = \text{sign_extend}(\text{offset}) + \text{GPR}[\text{base}]$

$\text{memory}[\text{Addr}] \leftarrow \text{GPR}[\text{rt}]$

示例: swe \$t1, 8(\$t0)

其他:

1. $\text{sign_extend}(\text{offset}) + \text{GPR}[\text{base}]$ 必是 4 的倍数。
2. $\text{sign_extend}(\text{offset}) + \text{GPR}[\text{base}]$ 不会越界。