

# Commit 481de63



cebarobot authored on Dec 3, 2025 · ✓ 12 / 12 · Verified

fix(vector): remove incorrect decode for some insts (#958)

In previous commit [a4dd9c0](#), the decode of vopm are divided into vopmvv (funct3=OPMVV) and vopmvx (funct3=OPMVX).

However, some instructions are incorrectly duplicated in both categories, e.g., there is only vredxor.vv but no vredxor.vx, but vredxor is put in both vopmvv and vopmvx. This commit removes those incorrect decodes.

Fix [#952](#).

master (#958) · v2026.04.r3 ... v2025.12.r2

1 parent [304d1da](#) commit 481de63

1 file changed

+8 -22

Top

src/isa/riscv64/instr/rvv

decode.h

src/isa/riscv64/instr/rvv/decode.h

```

@@ -204,7 +204,7 @@ def_THelper(vopivv) {
204 204     def_INSTR_TAB("010101 ? ????? ????? ??? ????? ????? ??", vro1);
205 205     def_INSTR_TAB("010100 ? ????? ????? ??? ????? ????? ??", vr0r);
206 206     def_INSTR_TAB("110101 ? ????? ????? ??? ????? ????? ??", vws1l);
207 -
207 +

```

```
208 208     return EXEC_ID_inv;
```

```
209 209     }
```

```
210 210
```



```
@@ -265,7 +265,7 @@ def_THelper(vopivx) {
```

```
265 265     def_INSTR_TAB("010101 ? ????? ????? ??? ????? ????? ??", vro1);
```

```
266 266     def_INSTR_TAB("010100 ? ????? ????? ??? ????? ????? ??", vro0);
```

```
267 267     def_INSTR_TAB("110101 ? ????? ????? ??? ????? ????? ??", vwsll);
```

```
268
```

```
-
```

```
268
```

```
+
```

```
269 269     return EXEC_ID_inv;
```

```
270 270     }
```

```
271 271
```



```
@@ -324,7 +324,7 @@ def_THelper(vopivi) {
```

```
324 324
```

```
325 325     def_INSTR_TAB("01010 ? ? ????? ????? ??? ????? ????? ??", vro0);
```

```
326 326     def_INSTR_TAB("110101 ? ????? ????? ??? ????? ????? ??", vwsll);
```

```
327
```

```
-
```

```
327
```

```
+
```

```
328 328     return EXEC_ID_inv;
```

```
329 329     }
```

```
330 330
```



```
@@ -344,6 +344,7 @@ def_THelper(vopmvv) {
```

```
344 344     def_INSTR_TAB("001001 ? ????? ????? ??? ????? ????? ??", vaadd);
```

```
345 345     def_INSTR_TAB("001010 ? ????? ????? ??? ????? ????? ??", vasubu);
```

```
346 346     def_INSTR_TAB("001011 ? ????? ????? ??? ????? ????? ??", vasub);
```

```
347
```

```
+
```

```
347 348     def_INSTR_TAB("010000 ? ????? ????? ??? ????? ????? ??", vwunary0_dispatch);
```

```
348 349     def_INSTR_IDTAB("010010 ? ????? ????? ??? ????? ????? ??", vxunary0_dispatch,
vxunary0_dispatch);
```

```
349 350     def_INSTR_TAB("010100 ? ????? ????? ??? ????? ????? ??", vmunary0_dispatch);
```



```
@@ -356,6 +357,7 @@ def_THelper(vopmvv) {
```

```
356 357     def_INSTR_TAB("011101 ? ????? ????? ??? ????? ????? ??", vmnand);
```

```
357 358     def_INSTR_TAB("011110 ? ????? ????? ??? ????? ????? ??", vmnor);
```

```
358 359     def_INSTR_TAB("011111 ? ????? ????? ??? ????? ????? ??", vmxnor);
```

```
360
```



```
+
```

```
359 361     def_INSTR_TAB("100000 ? ????? ????? ??? ????? ????? ??", vdivu);
```

```
360 362     def_INSTR_TAB("100001 ? ????? ????? ??? ????? ????? ??", vdiv);
```

```
361 363     def_INSTR_TAB("100010 ? ????? ????? ??? ????? ????? ??", vremu);
```

		@@ -368,6 +370,7 @@ def_THelper(vopmvv) {
368	370	def_INSTR_TAB("101011 ? ????? ????? ??? ????? ????? ??", vnmsub);
369	371	def_INSTR_TAB("101101 ? ????? ????? ??? ????? ????? ??", vmacc);
370	372	def_INSTR_TAB("101111 ? ????? ????? ??? ????? ????? ??", vnmsac);
373	+	
371	374	def_INSTR_TAB("110000 ? ????? ????? ??? ????? ????? ??", vwaddu);
372	375	def_INSTR_TAB("110001 ? ????? ????? ??? ????? ????? ??", vwadd);
373	376	def_INSTR_TAB("110010 ? ????? ????? ??? ????? ????? ??", vwsubu);
		@@ -381,7 +384,6 @@ def_THelper(vopmvv) {
381	384	def_INSTR_TAB("111011 ? ????? ????? ??? ????? ????? ??", vwmul);
382	385	def_INSTR_TAB("111100 ? ????? ????? ??? ????? ????? ??", vwmaccu);
383	386	def_INSTR_TAB("111101 ? ????? ????? ??? ????? ????? ??", vwmacc);
384	-	def_INSTR_TAB("111110 ? ????? ????? ??? ????? ????? ??", vwmaccus);
385	387	def_INSTR_TAB("111111 ? ????? ????? ??? ????? ????? ??", vwmaccsu);
386	388	
387	389	return EXEC_ID_inv;
		@@ -391,32 +393,15 @@ def_THelper(vopmvx) {
391	393	if (!vp_enable()) {
392	394	return EXEC_ID_inv;
393	395	}
394	-	def_INSTR_TAB("000000 ? ????? ????? ??? ????? ????? ??", vredsum);
395	-	def_INSTR_TAB("000001 ? ????? ????? ??? ????? ????? ??", vredand);
396	-	def_INSTR_TAB("000010 ? ????? ????? ??? ????? ????? ??", vredor);
397	-	def_INSTR_TAB("000011 ? ????? ????? ??? ????? ????? ??", vredxor);
398	-	def_INSTR_TAB("000100 ? ????? ????? ??? ????? ????? ??", vredminu);
399	-	def_INSTR_TAB("000101 ? ????? ????? ??? ????? ????? ??", vredmin);
400	-	def_INSTR_TAB("000110 ? ????? ????? ??? ????? ????? ??", vredmaxu);
401	-	def_INSTR_TAB("000111 ? ????? ????? ??? ????? ????? ??", vredmax);
402	396	def_INSTR_TAB("001000 ? ????? ????? ??? ????? ????? ??", vaaddu);
403	397	def_INSTR_TAB("001001 ? ????? ????? ??? ????? ????? ??", vaadd);
404	398	def_INSTR_TAB("001010 ? ????? ????? ??? ????? ????? ??", vasubu);
405	399	def_INSTR_TAB("001011 ? ????? ????? ??? ????? ????? ??", vasub);
406	-	
407	400	def_INSTR_TAB("001110 ? ????? ????? ??? ????? ????? ??", vslide1up);
408	401	def_INSTR_TAB("001111 ? ????? ????? ??? ????? ????? ??", vslide1down);
409	402	
410	403	def_INSTR_TAB("010000 ? ????? ????? ??? ????? ????? ??", vrxunary0_dispatch);
411	-	def_INSTR_TAB("010111 ? ????? ????? ??? ????? ????? ??", vcompress);
412	-	def_INSTR_TAB("011000 ? ????? ????? ??? ????? ????? ??", vmandnot);
413	-	def_INSTR_TAB("011001 ? ????? ????? ??? ????? ????? ??", vmand);

414	-	def_INSTR_TAB("011010 ? ????? ????? ??? ????? ????? ??", vmor);
415	-	def_INSTR_TAB("011011 ? ????? ????? ??? ????? ????? ??", vmxor);
416	-	def_INSTR_TAB("011100 ? ????? ????? ??? ????? ????? ??", vmornot);
417	-	def_INSTR_TAB("011101 ? ????? ????? ??? ????? ????? ??", vmnand);
418	-	def_INSTR_TAB("011110 ? ????? ????? ??? ????? ????? ??", vmnor);
419	-	def_INSTR_TAB("011111 ? ????? ????? ??? ????? ????? ??", vmxnor);
404	+	
420	405	def_INSTR_TAB("100000 ? ????? ????? ??? ????? ????? ??", vdivu);
421	406	def_INSTR_TAB("100001 ? ????? ????? ??? ????? ????? ??", vdiv);
422	407	def_INSTR_TAB("100010 ? ????? ????? ??? ????? ????? ??", vremu);
		@@ -429,6 +414,7 @@ def_THelper(vopmvx) {
429	414	def_INSTR_TAB("101011 ? ????? ????? ??? ????? ????? ??", vnmsub);
430	415	def_INSTR_TAB("101101 ? ????? ????? ??? ????? ????? ??", vmacc);
431	416	def_INSTR_TAB("101111 ? ????? ????? ??? ????? ????? ??", vnmsac);
417	+	
432	418	def_INSTR_TAB("110000 ? ????? ????? ??? ????? ????? ??", vwaddu);
433	419	def_INSTR_TAB("110001 ? ????? ????? ??? ????? ????? ??", vwadd);
434	420	def_INSTR_TAB("110010 ? ????? ????? ??? ????? ????? ??", vwsubu);
		

## Comments 0



Please [sign in](#) to comment.