# Pairings pulled from map:

(0, 25, 'cpu0', 'cache0', 'wt')

(1, 29, 'cpu1', 'cache1', 'wt')

(2, 26, 'cpu0', 'cache0', 'rd')

(3, 32, 'cpu1', 'cache1', 'rd')

(4, 35, 'gfx', 'membus', 'upwt')

(5, 36, 'audio', 'membus', 'upwt')

(6, 37, 'usb', 'membus', 'uprd')

(7, 11, 'cache1', 'cache0', 'wt')

(8, 12, 'cache0', 'cache1', 'wt')

(9, 18, 'membus', 'cache0', 'wt')

(10, 27, 'membus', 'cache0', 'rd')

(13, 24, 'cache0', 'membus', 'wt')

(14, 28, 'cache1', 'membus', 'wt')

(15, 23, 'membus', 'mem', 'rd')

(16, 20, 'cache1', 'cache0', 'rd')

(17, 19, 'cache0', 'cache1', 'rd')

(21, 30, 'cache0', 'membus', 'rd')

(22, 31, 'cache1', 'membus', 'rd')

(33, 34, 'membus', 'mem', 'wt')

(38, 40, 'gfx', 'membus', 'uprd')

(39, 41, 'audio', 'membus', 'uprd')

(42, 43, 'uart', 'membus', 'uprd')

(44, 45, 'membus', 'usb', 'wt')

(46, 47, 'membus', 'uart', 'rd')

(48, 49, 'membus', 'audio', 'rd')

(50, 51, 'membus', 'uart', 'wt')

(52, 53, 'membus', 'usb', 'rd')

(54, 55, 'membus', 'gfx', 'rd')

(56, 57, 'membus', 'gfx', 'wt')

(58, 59, 'membus', 'audio', 'wt')

## More specifically:

7 : cache1:cache0:wt:req 11 : cache0:cache1:wt:resp

8 : cache0:cache1:wt:req 12 : cache1:cache0:wt:resp

9 : membus:cache0:wt:req 18 : cache0:membus:wt:resp

17 : cache0:cache1:rd:req 19 : cache1:cache0:rd:resp

16 : cache1:cache0:rd:req 20 : cache0:cache1:rd:resp

15 : membus:mem:rd:req 23 : mem:membus:rd:resp

13 : cache0:membus:wt:req 24 : membus:cache0:wt:resp

10 : membus:cache0:rd:req 27 : cache0:membus:rd:resp

14 : cache1:membus:wt:req 28 : membus:cache1:wt:resp

21 : cache0:membus:rd:req 30 : membus:cache0:rd:resp

22 : cache1:membus:rd:req 31 : membus:cache1:rd:resp

33 : membus:mem:wt:req 34 : mem:membus:wt:resp

44 : membus:usb:wt:req 45 : usb:membus:wt:resp

46 : membus:uart:rd:req 47 : uart:membus:rd:resp

48 : membus:audio:rd:req 49 : audio:membus:rd:resp

50 : membus:uart:wt:req 51 : uart:membus:wt:resp

52 : membus:usb:rd:req 53 : usb:membus:rd:resp

54 : membus:gfx:rd:req 55 : gfx:membus:rd:resp

56 : membus:gfx:wt:req 57 : gfx:membus:wt:resp

58 : membus:audio:wt:req 59 : audio:membus:wt:resp

#

0 : cpu0:cache0:wt:req25 : cache0:cpu0:wt:resp

2 : cpu0:cache0:rd:req 26 : cache0:cpu0:rd:resp

1 : cpu1:cache1:wt:req29 : cache1:cpu1:wt:resp

3 : cpu1:cache1:rd:req32 : cache1:cpu1:rd:resp

4 : gfx:membus:upwt:req 35 : membus:gfx:upwt:resp

5 : audio:membus:upwt:req 36 : membus:audio:upwt:resp

6 : usb:membus:uprd:req 37 : membus:usb:uprd:resp

38 : gfx:membus:uprd:req 40 : membus:gfx:uprd:resp

39 : audio:membus:uprd:req 41 : membus:audio:uprd:resp

42 : uart:membus:uprd:req 43 : membus:uart:uprd:resp

## Code

A screen shot of a computer screen

Description automatically generated

# Trace List extracted from trace-small-5.txt

TRACE LIST trace-small-5.txt

[3, 16, 20, 22, 52, 53, 31, 32, 0, 8, 12, 13, 54, 55, 24, 25, 2, 0, 17, 19, 8, 12, 13, 15, 21, 52, 23, 53, 30, 24, 26, 25, 1, 0, 8, 29, 12, 13, 48, 49, 24, 25, 3, 1, 16, 7, 20, 11, 22, 29, 15, 23, 31, 32, 2, 17, 19, 21, 48, 49, 30, 26, 1, 7, 1, 7, 11, 11, 14, 15, 23, 28, 29, 14, 46, 47, 28, 29, 3, 16, 2, 17, 20, 19, 32, 21, 52, 53, 30, 26, 2, 17, 1, 19, 21, 7, 15, 11, 29, 23, 30, 26, 2, 17, 19, 26, 1, 7, 11, 14, 54, 55, 28, 29, 0, 8, 12, 13, 46, 2, 47, 24, 17, 19, 21, 25, 52, 53, 30, 26, 2, 17, 19, 21, 54, 55, 30, 26, 2, 17, 0, 8, 12, 13, 19, 21, 15, 15, 23, 30, 23, 26, 24, 25, 0, 8, 12, 25, 3, 16, 20, 32, 2, 17, 19, 21, 15, 23, 30, 26, 2, 17, 19, 21, 46, 47, 30, 26, 0, 8, 12, 25, 2, 17, 19, 21, 48, 49, 30, 26, 1, 7, 11, 14, 48, 49, 28, 29, 2, 17, 19, 21, 48, 49, 30, 26, 1, 7, 11, 14, 52, 53, 28, 29, 1, 7, 11, 14, 0, 8, 15, 12, 23, 13, 28, 29, 48, 49, 24, 25, 0, 8, 12, 13, 54, 55, 24, 25, 2, 17, 19, 21, 48, 49, 30, 26, 0, 8, 12, 13, 52, 53, 24, 25, 3, 0, 16, 20, 8, 22, 12, 15, 25, 23, 31, 32, 2, 3, 16, 20, 22, 52, 17, 53, 19, 21, 31, 32, 46, 47, 30, 26, 3, 16, 20, 22, 54, 55, 31, 32, 3, 16, 20, 32, 3, 1, 16, 20, 7, 22, 48, 49, 31, 11, 14, 32, 15, 23, 28, 29, 2, 17, 0, 8, 12, 13, 19, 21, 46, 15, 23, 47, 24, 30, 25, 26, 2, 17, 19, 21, 15, 23, 30, 26, 2, 26, 0, 8, 12, 3, 16, 25, 20, 22, 46, 47, 31, 32, 2, 2, 17, 17, 19, 19, 21, 52, 26, 53, 30, 26, 1, 7, 11, 14, 15, 23, 28, 29, 1, 7, 0, 11, 8, 12, 14, 13, 54, 54, 55, 55, 28, 24, 29, 25, 0, 25, 1, 7, 11, 14, 15, 23, 28, 29, 3, 0, 8, 16, 12, 25, 20, 22, 46, 47, 31, 32, 0, 8, 12, 13, 46, 47, 24, 25, 1, 7, 11, 14, 46, 47, 28, 29, 0, 25, 0, 8, 12, 13, 52, 53, 24, 25, 3, 16, 20, 22, 52, 53, 31, 32, 2, 17, 19, 0, 21, 8, 12, 46, 13, 15, 47, 30, 23, 26, 24, 25, 0, 8, 12, 13, 52, 53, 24, 25, 3, 32, 1, 7, 11, 14, 54, 55, 28, 29, 3, 32, 1, 2, 7, 11, 14, 48, 49, 17, 19, 21, 48, 28, 49, 29, 30, 26, 3, 16, 20, 32, 2, 17, 19, 21, 54, 55, 30, 26, 0, 3, 16, 8, 12, 20, 22, 13, 54, 55, 31, 46, 32, 47, 24, 25, 0, 25, 1, 7, 11, 14, 46, 47, 28, 29, 3, 32, 2, 26, 3, 16, 20, 22, 54, 55, 31, 32, 1, 7, 11, 14, 48, 49, 28, 29, 3, 16, 20, 22, 48, 49, 31, 32, 3, 16, 0, 20, 22, 52, 8, 53, 12, 31, 13, 32, 48, 49, 24, 25, 3, 0, 16, 20, 8, 22, 54, 12, 55, 13, 48, 31, 49, 32, 24, 25, 1, 7, 1, 7, 11, 11, 14, 14, 48, 46, 49, 28, 29, 47, 28, 29, 0, 8, 12, 13, 54, 55, 24, 25, 0, 8, 12, 13, 46, 47, 24, 25, 1, 7, 11, 14, 54, 55, 28, 29, 1, 7, 11, 14, 46, 47, 28, 29, 3, 1, 16, 20, 32, 7, 11, 14, 48, 49, 28, 29, 1, 7, 11, 29, 0, 25, 3, 16, 20, 22, 52, 53, 31, 32, 3, 16, 20, 22, 46, 47, 31, 32, 0, 8, 12, 13, 52, 53, 24, 25, 2, 2, 26, 17, 19, 21, 46, 47, 30, 26, 0, 2, 17, 8, 12, 13, 54, 55, 24, 19, 25, 26, 1, 7, 3, 11, 32, 14, 52, 53, 28, 29, 3, 16, 20, 22, 54, 55, 31, 32, 0, 25, 1, 7, 11, 14, 52, 53, 28, 29, 1, 7, 0, 11, 14, 54, 8, 55, 28, 12, 29, 13, 52, 53, 24, 25, 2, 17, 19, 21, 2, 26, 54, 55, 30, 26, 3, 32, 0, 2, 17, 19, 8, 21, 12, 52, 13, 53, 30, 26, 15, 23, 24, 25, 2, 1, 7, 11, 17, 14, 19, 21, 52, 46, 53, 47, 30, 26, 28, 29, 2, 17, 19, 26, 1, 0, 7, 8, 11, 12, 14, 52, 13, 15, 23, 24, 25, 53, 28, 29, 3, 16, 20, 22, 46, 47, 31, 32, 1, 7, 11, 29, 2, 26, 3, 16, 20, 22, 15, 23, 31, 32, 3, 2, 16, 20, 17, 22, 46, 19, 47, 31, 26, 32, 3, 0, 8, 12, 13, 16, 20, 22, 48, 48, 49, 49, 24, 25, 31, 32, 1, 7, 3, 11, 29, 16, 20, 22, 48, 49, 31, 32, 3, 16, 20, 22, 48, 49, 31, 32, 1, 3, 16, 29, 20, 22, 15, 23, 31, 32, 3, 16, 20, 22, 15, 23, 31, 32, 1, 29, 1, 29, 2, 17, 19, 21, 54, 55, 30, 26, 1, 29, 2, 17, 19, 21, 54, 55, 30, 26]

## Code

A computer screen with colorful text

Description automatically generated

# Extracted sequences for trace-small-5.txt

[0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25, 0, 25]

[1, 29, 1, 29, 1, 1, 29, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 1, 29, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29, 1, 29]

[2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 2, 26, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 2, 26, 26, 2, 26, 2, 2, 26, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26, 2, 26]

[3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32, 3, 32]

[7, 11, 7, 7, 11, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 7, 11, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11, 7, 11]

[8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12, 8, 12]

[13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24, 13, 24]

[14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 14, 28, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28, 14, 28]

[15, 23, 15, 23, 15, 23, 15, 23, 15, 15, 23, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23, 15, 23]

[16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20, 16, 20]

[17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 17, 19, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19, 17, 19]

[21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30, 21, 30]

[22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31, 22, 31]

[46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47, 46, 47]

[48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 49, 48, 48, 49, 49, 48, 49, 48, 49]

[52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53, 52, 53]

[54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 54, 55, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55, 54, 55]

## Code

A computer screen shot of code

Description automatically generated

(only iterate through trace list once)

# File output

A screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A close-up of a word

Description automatically generated