

Code Coverage Tool for RISC-V and Arm from Ashling

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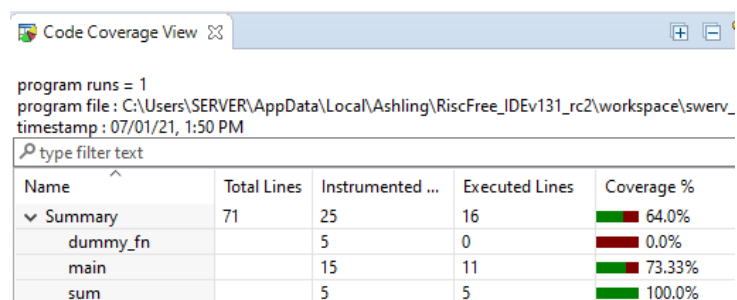
Ashling announces immediate availability of an integrated Code Coverage Tool for Arm and RISC-V based target applications within Ashling's *RiscFree™* IDE and Debug solution.

Identifying untested code is an essential part of any software test plan and an automated means of recording the coverage of source code during unit test execution is either required or recommended by many software engineering standards. Measuring code coverage - the percentage of the overall software system that has been executed at least once - provides a quantitative measure of confidence in the design, and it also helps us to answer a key question in software engineering: when can we stop testing? *RiscFree™* records and displays the code memory addresses which are accessed during testing, enabling you to determine which sections of your code have been executed and which have not.

```

12 extern int sum(int start, int end);
13
14 /* This function is never called */
15 int dummy_fn(int start, int end)
16 {
17     int sum = 0;
18     for(int i = start; i <= end; i++){
19         sum += i;
20     }
21     return sum;
22 }
23
24
25 /*-----*/
26 /* main function: call sum */
27 /*-----*/
28 int main()
29 {
30     int x=3,y=9,z=0;
31
32     z = sum(x,y);
33     if (z > 500) {
34         x=3;
35         y=9;
36     } else {
37         x++;
38         y++;
39     }
40
41     z = sum(x,y);
42     if (z < 500) {
43         x=3;
44         y=9;
45     } else {
46         x++;
47         y++;
48     }

```



Code Coverage View

program runs = 1
program file : C:\Users\SERVER\AppData\Local\Ashling\RiscFree_IDEv131_rc2\workspace\swerv_
timestamp : 07/01/21, 1:50 PM

type filter text

Name	Total Lines	Instrumented ...	Executed Lines	Coverage %
Summary	71	25	16	64.0%
dummy_fn	5	5	0	0.0%
main	15	15	11	73.33%
sum	5	5	5	100.0%

RiscFree™ Code Coverage display in the Source and Code Coverage Views

RiscFree™ IDE, Ashling's professional, commercial grade software development environment includes support for embedded 32-bit and 64-bit Arm and RISC-V based devices. The Eclipse based IDE for RISC-V development is a seamless environment for software development from writing and building code to simulating and hardware debugging. *RiscFree™* IDE has heterogeneous multicore debug capabilities and can be used together with Ashling's Opella-XD hardware debug probe and OpenOCD compatible probes.

Press Release

About Ashling Microsystems

Ashling Microsystems is an international Embedded Software Solutions and Debug Tools company, providing high-performance software and hardware tools for a range of embedded 32-bit and 64-bit architectures. Through its close cooperation with leading semiconductor vendors, Ashling is a world leader in the Embedded Software Development Tools market. Ashling's development centre is in Limerick Ireland. Ashling has sales and support representatives worldwide. Visit

www.ashling.com

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