

GOFAST[®] for Metaware High C

Features

- Fast
- Reentrant
- ROMable
- Conforms to IEEE 754
- "Link and Go" compiler support
- Includes C startup code
- Includes sscanf and sprintf
- Includes test programs and make file

Description

GOFAST[®] for High C was carefully designed for high performance operation and ease of use including "link and go" compatibility with the Metaware High C compiler for protected mode applications. GOFAST provides ROMable, reentrant IEEE and ANSI compatible floating point support.

Functionality

GOFAST supports reentrant floating point calculations for the High C compiler. GOFAST includes a complete protected mode floating point emulator.

GOFAST-HIGHC is faster than the Metaware emulator, complies fully with IEEE 754, and emulates all hardware features exactly. GF-HIGHC is reentrant in the same way as the floating point coprocessor. In a task switch, an FSAVE instruction saves the floating point status, and an FRSTOR restores it. GF-HIGHC is fully ROMable. In other words, it does not change any data in the code segment, it does not assume any initial value in the data segment, and it does not need DOS to run.

GF-HIGHC provides two floating point emulator versions; one for flat addressing, and one for segmented addressing. The floating point emulators are "true" emulators, they use the "coprocessor not present" interrupt. GF-HIGHC will use a 387 if one is present.

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Considerations

GOFAST is primarily designed to facilitate embedded operation. However, it is also tuned for performance. The following table shows the results of a Whetstone benchmark using a 25 MHz 386 both with and without a coprocessor.

FP Support	Whetstones	
	wo/387	w/387
High C calls	95	382
High C + GF	287	2028

GOFAST Support:

U S Software maintains a test lab where comprehensive confidence tests are performed on GOFAST in each target environment. A demonstration test program is included with your product delivery, and you are encouraged to run it on your own target hardware to verify system operation. Phone and fax support are provided with the product. Extended support is also available.