

## Re: Calculating cycles/byte

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"J. Campbell" wrote:

- >
- > *I've been toying with some hash-functions and wanted to know how*
- > *people measure "cycles/byte". On my 1.5 GHz, win xp machine (on-line*
- > *with several programs running), I can push an 18 MB zip file through*
- > *my alg in about 0.1 sec. Back of envelope, I get ((1.5 bil cyc/sec) \**
- > *(0.1 sec) / (18 mil bytes) = 8.3 cyc/byte.)*
- >
- > *Does anyone know how to accurately calculate the cyc/byte?*

The same instruction may need different cycles for different members of e.g. the Intel family. So I wonder why do you want that quantity (since it can't be translated to different hardware). If you do want that, you could use the C standard function `clock()` to time the processing of `n` bytes, with `n` sufficiently large in order to get a significant value, say of the order of 100 sec. Then knowing the MHz of your machine, I suppose you could get a reasonably good result (though not 'very' accurate in my experience). (I would prefer not to let concurrent user jobs be run during the measurement, though I am not sure whether that's really necessary.)

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