

# The Embedded Muse 44

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## Editor's Notes

I get a lot of response to these Embedded Muses, both positive and at times negative, though always well reasoned and thoughtful. One pattern has become clear, though. Musings on technical subjects seems to be well received, while those about managing the embedded design process sometimes provoke discontent. One wag gently calls those Muses that discuss non-technical issues “content-free”.

Yet I can't leave process and management issues alone; these are at the very root of the success of any development effort. So, I've decided to partition the management musings into a separate newsletter (Managing Embedded Systems). I'd never automatically subscribe anyone, so if interested, sign up by either dropping me an email (<mailto:jack@ganssle.com>) or by entering your email address and hitting the signup button at <http://www.ganssle.com>. Feel free to pass this on to your boss as well, especially if you feel he/she needs more insight into embedded issues... ;)

I also want to assure Muse readers that, despite constant queries, I never make this list available to any other person or organization.

Finally, last issue I asked readers to submit info about the good and bad experiences they've had with their toolchains. A handful of readers (thanks all!) sent in comments, all of which are now online at <http://www.ganssle.com/tool-rvw/tools.html>. <nag> But here's a bit of gentle nagging: please do contribute comments on your tools. The more data we acquire, the more useful this service will be to the rest of the industry. A frequent complaint we hear is that developers are so busy doing projects they don't take the time to write or to interact with their peers. The result is a loss to us all, as we all wind up making the same mistakes. Here's a chance to break this habit, to the betterment of everyone. </nag>

## File Format Central

What's the format of OMF? How about .BMP files or IEEE-695? Did you forget the layout of Intel Hex files? Don't despair, help is here. One very cool website that logs hundreds of file formats, as well as other useful goodies like mouse comm standards, x86 instruction sets, etc, is <http://www.wotsit.org>. Highly recommended.

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In researching an upcoming article about USB for Embedded Systems Programming I found that Jan Axelson has a new book about the subject. She's the wiz who brought us "Serial Port Complete" and "Parallel Port Complete". Her new book is an essential resource for USB developers. Her site (<http://www.lvr.com>) contains links to most every USB data source. Also highly recommended.

## Thought for the Week

From Steve Litt at troubleshooters.com:

Millennium Pie (with apologies to Don McLean)

A long, long time ago... I can still remember how  
Computers used to make me smile.  
And I knew if I had my chance,  
That I could make electrons dance,  
And maybe I'd be happy for a while.  
But January made me shiver,  
it chilled me deep down in my liver,  
Bad news I'd collected...  
I couldn't get connected.  
I can't remember back that day  
When I first knew the Y2K  
But something touched me anyway,  
The day computers died.

So, ...Bye, bye to the next digit of Pi  
Ran my PC on some DC but the voltage was dry  
And good ol' boys were sending e-mail replies  
Saying this will be the day I retire  
this will be the day I retire

Can you write in C plus plus ?  
And do you have faith in your local bus  
If the driver tells you so?  
Do you believe in Compaq's goals  
Can software save your mortal soul  
And can you teach me how to type real slow ?  
Well I thought that you were prepared  
'Cause your memo said you weren't impaired  
Your stationery's swell  
But you can go to hell

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I was a lonely teenage Unix hack  
With an incantation and a modem jack  
but I knew the cat had left the sack  
The day computers died  
I started singin'...

Bye, bye to the next digit of Pi  
Ran my PC on some DC but the voltage was dry  
And good ol' boys were sending e-mail replies  
Saying this will be the day I retire  
this will be the day I retire

Now for 10 years we've ignored the threat  
And we haven't solved the problem yet  
But that's not how it used to be  
When the luddites read for the king and queen  
with a light they filled with kerosene  
And some manuals they stole from you and me  
And while Bill Gates was looking pleased  
Time stole his monopolies  
The courtroom was adjourned  
No verdict was returned  
While Apple tried a color scheme  
The engineers returned to steam  
And we had purges of their dreams  
The day computers died  
We were singin'

Bye, bye to the next digit of Pi  
Ran my PC on some DC but the voltage was dry  
And good ol' boys were sending e-mail replies  
Saying this will be the day I retire  
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Intel inside in an iron smelter  
The food leftover from my fallout shelter  
Twinkies old and aging fast  
I'd rather eat the grass  
Q and A tried for a system crash  
With the tester on the sidelines in a cast  
Now the timeshare net was running Doom  
While mainframes played a marching tune  
We all tried to log in  
Oh, but we never could begin

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'Cause Cobol tried to take the field,  
And Hollerith refused to yield.  
Do you recall what was revealed,  
The day computers died?  
We started singing

Bye, bye to the next digit of Pi  
Ran my PC on some DC but the voltage was dry  
And good ol' boys were sending e-mail replies  
Saying this will be the day I retire  
this will be the day I retire

There we were all in a state  
A generation - really late  
With no time left to start again  
So come on mouse be nimble, mouse be quick  
Don't let my spreadsheet data stick  
Cause data is the devil's only friend.  
As I watched him on my screen  
My hands and face were drenched in steam  
No angel born in hell  
Could run that stupid shell  
And as the ball climbed high into the night  
To call the sacrificial night  
I saw Dick Clark laughing with delight  
the day computers died.  
I met a girl with a cell phone  
And I asked her for a dial tone  
But she just smiled and turned away

I went down to the software store  
Where I'd seen computers years before  
But the man there said the games there wouldn't play  
And in the streets the children screamed  
The lovers cried and the poets dreamed  
their interface was spoken  
The Internet was broken

And the three things I connect to most  
The Website, Lan and the Network host  
Every single one was toast  
The day computers died  
They were singin'

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Ran my PC on some DC but the voltage was dry  
And good ol' boys were sending e-mail replies  
Saying this will be the day I retire  
this will be the day I retire.

## **About The Embedded Muse**

The Embedded Muse is an occasional newsletter sent via email by Jack Ganssle. Send complaints, comments, and contributions to him at [jack@ganssle.com](mailto:jack@ganssle.com).

To subscribe, send a message to [majordomo@ganssle.com](mailto:majordomo@ganssle.com), with the words "subscribe embedded *your-email-address*" in the body. To unsubscribe, change the message to "unsubscribe embedded *your-email-address*".

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