Gopher: Find Me A Microcontroller

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What do you do when you start a new microcontroller project? Crack the product catalog or log onto a vendor's Web site? Sticking with paper is tedious. A single vendor can have literally hundreds of chips that are potential candidates for your next project. Using a vendor's Web site is better but what about comparing products or searching with criteria that the vendor does not support? That is what GruntWare's Gopher is for.

Gopher is essentially a front-end to a database of microcontroller specifications. The application starts with a set of basic filters, including the vendor as well as basic criteria such as the number of serial ports or CAN ports (Fig. 1). This is on par with what most vendor sites provide but its cross vendor support makes comparisons significantly easier.

But where Gopher shines is in its detailed search criteria (Fig. 2). There are literally pages of details allowing you to fine tune the search for peripheral specifications down to the bit or temperature detail. The search options are Gopher-specific, but they're easy to learn and utilize. The challenge, really, is the number of options. Unfortunately, there is no grouping of the options even into major categories such as Analog Peripherals or Memory. There are literally hundreds of options, which is obviously good, but knowing what to use and finding them is not.

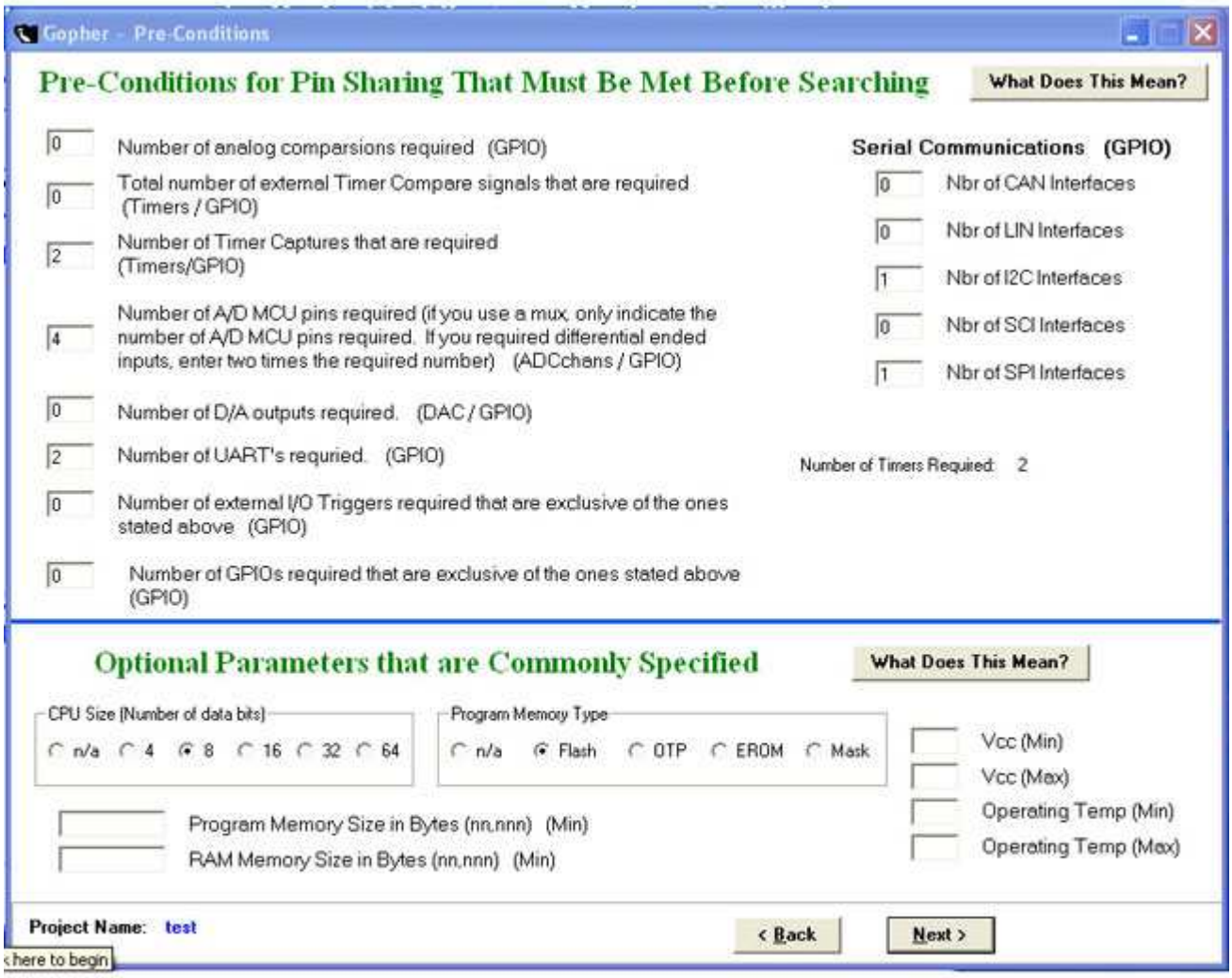
The final result is a list of chips with all their details (Fig. 3). This is where the big nit is. The list has hundreds of columns. It is possible to hide and size columns. It is also possible to do more than one search, but typically you need to print out the result to see everything.

Of course, while I'm nitpicking, another chink in the armor is Gopher's inability to save results in a spreadsheet or data format where they could be manipulated or used in reports—since justification of a selection is often part of the job.

For an initial release, Gopher is worth the investment. The time you save easily offsets its cost. Just think of how many hours you would spend browsing the Internet to get this kind of information especially if you have not chosen your supplier.

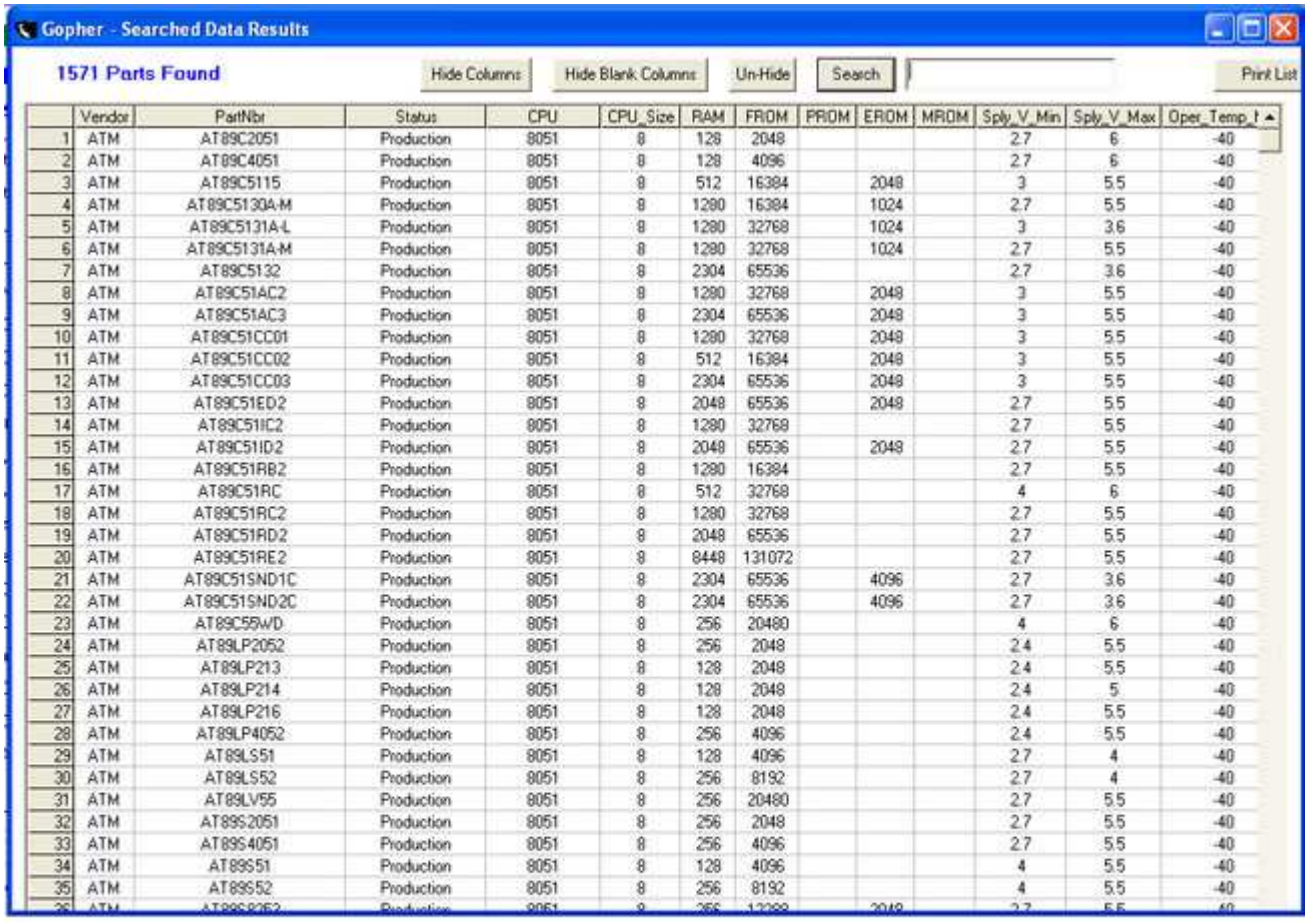
Gopher is priced at $299 plus shipping.

GruntWare
www.gruntwareinc.com



Step 1: Pre-conditions

Step 2: Refine the search conditions



	Vendor	PartNbr	Status	CPU	CPU_Size	RAM	FROM	PROM	EROM	MROM	Sply_V_Min	Sply_V_Max	Oper_Temp_I
1	ATM	AT89C2051	Production	8051	8	128	2048				2.7	6	-40
2	ATM	AT89C4051	Production	8051	8	128	4096				2.7	6	-40
3	ATM	AT89C5115	Production	8051	8	512	16384		2048		3	5.5	-40
4	ATM	AT89C5130A-M	Production	8051	8	1280	16384		1024		2.7	5.5	-40
5	ATM	AT89C5131A-L	Production	8051	8	1280	32768		1024		3	3.6	-40
6	ATM	AT89C5131A-M	Production	8051	8	1280	32768		1024		2.7	5.5	-40
7	ATM	AT89C5132	Production	8051	8	2304	65536				2.7	3.6	-40
8	ATM	AT89C51AC2	Production	8051	8	1280	32768		2048		3	5.5	-40
9	ATM	AT89C51AC3	Production	8051	8	2304	65536		2048		3	5.5	-40
10	ATM	AT89C51CC01	Production	8051	8	1280	32768		2048		3	5.5	-40
11	ATM	AT89C51CC02	Production	8051	8	512	16384		2048		3	5.5	-40
12	ATM	AT89C51CC03	Production	8051	8	2304	65536		2048		3	5.5	-40
13	ATM	AT89C51ED2	Production	8051	8	2048	65536		2048		2.7	5.5	-40
14	ATM	AT89C51IC2	Production	8051	8	1280	32768				2.7	5.5	-40
15	ATM	AT89C51ID2	Production	8051	8	2048	65536		2048		2.7	5.5	-40
16	ATM	AT89C51RB2	Production	8051	8	1280	16384				2.7	5.5	-40
17	ATM	AT89C51RC	Production	8051	8	512	32768				4	6	-40
18	ATM	AT89C51RC2	Production	8051	8	1280	32768				2.7	5.5	-40
19	ATM	AT89C51RD2	Production	8051	8	2048	65536				2.7	5.5	-40
20	ATM	AT89C51RE2	Production	8051	8	8448	131072				2.7	5.5	-40
21	ATM	AT89C51SND1C	Production	8051	8	2304	65536		4096		2.7	3.6	-40
22	ATM	AT89C51SND2C	Production	8051	8	2304	65536		4096		2.7	3.6	-40
23	ATM	AT89C55WD	Production	8051	8	256	20480				4	6	-40
24	ATM	AT89LP2052	Production	8051	8	256	2048				2.4	5.5	-40
25	ATM	AT89LP213	Production	8051	8	128	2048				2.4	5.5	-40
26	ATM	AT89LP214	Production	8051	8	128	2048				2.4	5	-40
27	ATM	AT89LP216	Production	8051	8	128	2048				2.4	5.5	-40
28	ATM	AT89LP4052	Production	8051	8	256	4096				2.4	5.5	-40
29	ATM	AT89LS51	Production	8051	8	128	4096				2.7	4	-40
30	ATM	AT89LS52	Production	8051	8	256	8192				2.7	4	-40
31	ATM	AT89LV55	Production	8051	8	256	20480				2.7	5.5	-40
32	ATM	AT89S2051	Production	8051	8	256	2048				2.7	5.5	-40
33	ATM	AT89S4051	Production	8051	8	256	4096				2.7	5.5	-40
34	ATM	AT89S51	Production	8051	8	128	4096				4	5.5	-40
35	ATM	AT89S52	Production	8051	8	256	8192				4	5.5	-40

Step 3: List of results