

November Meeting: Suzette de GUZMAN: *EXCEL*

Volume IV (New Series), Issue 11 — November 2014

7:00 P.M. Tuesday (the 25th) at the Regional Center, 4801 Springfield Street, about one mile west of the Air Force Museum — click [here](#) for a map. All DMA meetings are free and open to the public. Plenty of free onsite parking, too. Also reachable via RTA bus route 11 — click [here](#) for a system map. The building is handicapped-accessible. Bring a friend!

THERE SEEM TO BE TWO TYPES OF PEOPLE: those who never use Excel and those who use it all the time. Once people get comfortable with all those little boxes and begin to make use of the most common applications for Excel, they are bound to get hooked. A checkbook register can lead to family budgets and portfolio management in Excel. Charts can become graphs, pivot tables, or pivot charts. Find the menu link to the Visual Basic Editor, and Excel will allow you to design PC applications.

SUZETTE DE GUZMAN is a DMA member who has experience using Excel every day at home and at work. She will explain some of the simpler applications in Excel and demonstrate some of the more advanced features.

Please join us after the meeting at Donato's Pizza, 5600 Airway Road. Click [here](#) for a map.

The Databus
Newsletter of the Dayton Micromonoputer Association, Inc.

Classic COMPUTERFEST T-shirts and branded merchandise from “way back when” will still be available at this DMA meeting. Each item is a piece of DMA history — and so *reasonably* priced, too!

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New! Click on the underlined page number to go directly to the article.



Post Office Box 4005
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We have a new URL!

DMA1.org

Your 2014/15 Officers:

President

Gary COY

Vice-President

Eric OTTOSON

Secretary

Debra MCFALL

Treasurer

Glady CAMPION

Officers need not be Trustees.

Trustees:

Martin ARBAGI

Glady CAMPION

Gary COY

Debra MCFALL

Eric OTTOSON

Wynn ROLLERT

Ed SKUYA

Gary TURNER

Jim ULLOM

Webmaster:

Dave LUNDY

ESTABLISHED IN 1976, DMA is a group of Dayton-area professionals and hobbyists in the field of computing and information technology. General membership meetings are usually on the last Tuesday of each month. DMA has a number of Special Interest Groups (SIGs) in areas ranging from digital photography and genealogy to the Linux operating system. Each SIG meets according to its own schedule. DMA is a member of Association of Personal Computer Users' Groups (APCUG) and the Affiliated Societies Council (ASC). Click on any of the logos — including our own — to go to that organization's Web site.



Submissions ...

THE DATABUS welcomes compliments, complaints, suggestions, and especially articles. We can accept articles in ASCII, or as attachments in Microsoft Word or Works, Open Office Writer, Word Perfect, or, yes, even WordStar (a word-processing program that goes all the way back to the 1980s!). No PDF files, please. Send e-mails to:

Editor@DMA1.org

All articles are subject to editing for spelling, grammar, usage, and space. Always retain a copy of your work, as THE DATABUS cannot be responsible for loss. When articles are of roughly equal quality, those by paid-up DMA members usually receive preference.

ALL REGISTERED TRADEMARKS, for example: DMA, AMD, Excel, IBM, or Sandisk, are the property of their respective owners. However, for better readability, the Registered Trade Mark symbols (® or ™) have been omitted. The Editor occasionally inserts comments into articles. Such comments are always in square brackets [like these] and are preceded by the phrase: "EDITOR'S NOTE."

THE DATABUS is written and published by volunteers. We do not give professional advice on computer, network, or software installation, troubleshooting, or repair. If you need professional advice or other expert assistance, please seek the services of a competent professional.

MINUTES are usually published almost *two months late*. This is because the Minutes for, say, the October Board meeting must be approved by the Trustees at the following month's meeting — in this case, early November. The corrected and approved October Minutes will thus appear in this (November) issue of THE DATABUS, which comes out just before the General Membership Meeting at the end of the month.

Minutes of the Meeting of the Board of Trustees of the Dayton Microcomputer Association[®], Inc., 6 October 2014

CALL TO ORDER

The meeting was called to order at 7:02 P.M. by Gary Coy. **Trustees present:** Martin Arbagi, Gladys Campion, Gary Coy, Debra McFall, Eric Ottoson, Ken Phelps, Wynn Rollert, Gary Turner. (Ed Skuya and Jim Ullom were excused.) **Others Present:** Charles Rockett.

OFFICERS' REPORTS

President—Gary Coy

Congratulations to the newly-elected (or reëlected) Trustees.

Vice President—Ken Phelps

No report.

Secretary—Debra McFall

Debra presented the Minutes for the September Board meeting. Eric Ottoson moved the Minutes be accepted. Wynn Rollert seconded and the motion passed.

Treasurer—Gladys Campion

Gladys presented a revenue and expense report for January 1 through September 30, 2014. Sales of branded merchandise has brought in a total of \$550.80 so far.

COMMITTEE REPORTS

Audit—Gladys Campion

No report.

Bylaws Review—Grant Root

No report.

Funding—Open

No report.

Membership—Dave Lundy, Gladys Campion

We have 101 regular members, 5 associate members, 0 student members and 2 life members for a total of 108 members. Attendance for the September meeting was 38 and the 50/50 raffle brought in \$27.

Net Admin Team—Ken Phelps, Gary Turner

We are creating the parameters for the development of a new Web site.

Programs—Jim Ullom

No report.

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Publications—**Martin Arbagi**

The September DATABUS is on the DMA Web site.

OLD BUSINESS

HOLIDAY DINNER—**Glady Campion**

The Holiday Dinner will be at the Spaghetti Warehouse on Tuesday, December 9, 2014. Social hour begins at 6:00 P.M., dinner begins at 7 P.M., and the drawing begins at 8 P.M. We are trying to get at least sixty people to sign up so we can get a larger room this time. Tickets are \$5 per person. The cost of the dinner will be around \$20 per person.

NEW BUSINESS

STORAGE LOCKER CLEAN-UP COMMITTEE—**Debra McFall, Glady Campion**

Wynn Rollert has offered to buy many items from the storage locker for \$550. Ken will check with Dayton Diode to make sure they don't want any items from the storage locker. If they don't, Wynn will purchase those items and move them. Glady will remove old copies of the Databus and Debra will remove old cables from the storage locker. Glady will find out how long old records need to be kept and our next step will be to shred or throw out old records.

BOARD MEETINGS—**Glady Campion**

The next Board Meeting will be held at 7:00 P.M. on Monday, November 3, 2014 at Brixx Ice Company, 500 East 1st St, Dayton, Ohio 45402. Please come at 6 if you would like to eat first.

ELECTION OF OFFICERS

All current officers were reelected.

GOOD OF THE ORDER

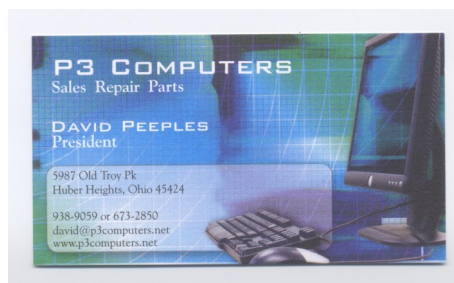
Glady asked to be reimbursed \$35 for the gift DMA gave at the Fall Joint Meeting. Eric Ottoson moved that Glady be reimbursed. Wynn Rollert seconded and the motion passed.

ADJOURNMENT

Gary Coy moved to adjourn at 8:17 P.M. Eric Ottoson seconded and the motion passed.

Respectfully Submitted,

Debra McFall, Secretary



5% Discount to DMA
members!
(Special orders excluded.)

—The AMD A10-7800 CPU—

By Daniel WOODARD

Dayton Microcomputer Association DMA1.org

DGW (at) DMA1.org

IS YOUR COMPUTER BOGGING DOWN, perhaps not powerful enough to handle daily tasks or games? You've surely heard the old adage: "Take two aspirins and call me in the morning." In the same vein, folks often would upgrade both a video card and the processor to try to speed up their PC. Recently, processors began arriving that combined both a traditional CPU and video card (GPU) into one unit. The recently released AMD A10-7800 is one of these, called an APU, or accelerated processing unit.

Although my computer had a fairly competent processor (Phenom II x4), the motherboard's onboard graphics were very weak, to the point where I was seeing huge amounts of lag when I or my kids were playing some basic browser games. I'm one of those folks who likes simplicity, so I've enjoyed watching as LAN cards, sound cards and even video cards have been integrated onto the motherboard. This was fine at first, but eventually I found myself wanting to upgrade the video capabilities, and I'd rather be able to do this without having to pull the motherboard or add a video card. I've had video cards in the past, but prefer the fanless variety since they don't add background noise, and there's no fan that can go bad. Silent video cards with huge heat sinks are more of a niche market today, so prices for better performers have climbed up between \$75 and \$100.

The AMD A10 range of processors offered exactly what I wanted, using the FM2+ socket. (first released earlier this year) The A10-7800 has what is probably the best built in graphics on a very competent but energy efficient processor. Since the graphics are built into the processor, there is no additional heat sink or fan required — it just uses the same heat sink fan that every CPU has anyway. Another advantage is that if I eventually decide to upgrade in a year or two, I can simply and quickly upgrade both the CPU and video elements of my system just by pulling the CPU and inserting a new one — no muss, no fuss.

My prior CPU was the Phenom II X4, running at 2.8 GHz. It drew 95 watts and put out quite a bit of heat. The first thing I noticed about the new A10 cpu was that the heat sink was about half the size of that required for the old Phenom II. I hadn't expected it to be much smaller, considering that now there was also essentially a video card crammed in there as well!

AMD's press release mentions that the processor supports UltraHD (4K) monitor resolutions. The A10-7800 (formerly known as Kaveri) also is touted as having 12 compute cores — 4 CPU and 8 GPU. It runs at a base clock frequency of 3.5 GHz, activating a turbo frequency of 3.9 GHz if an application is demanding. It has 512 video shader cores and a listed 65 watts of drawn power. Also incorporated is AMD TrueAudio, a built in DSP processor that provides dedicated positional sound effects calculation (including echo, etc.) for games. At the time of this writing, the processor is available for around \$140.

As I had mentioned, my main reason for wanting an upgrade was extreme slowdown/lag when playing browser games. I had also noticed an occasional lockup once or twice a month, and decided it was time to install new components. I used Browsermark and PCMark 8 to compare my sys-

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tem before and after the upgrade. Originally I had the AMD Phenom II x4 925 CPU and onboard Radeon HD 4250 video.

Phenom II x4 925 (4 core, 2.8 GHz, 95 watt) ----- A10-7800 (4 core, 3.9 GHz, 65 watt)

Winrar 156 Megabyte compress 109 seconds ----- 114 seconds

Hyper Pi 8m calc., 22 iterations 5 min. 26 seconds ----- 4 min. 26 seconds

142 Watts full load, 83 W at rest ----- 115 Watts full load, 60 W at rest

of transistors: 758 million ----- # of transistors: 2.41 billion

PCMark 8 casual Gaming 7.8 fps ----- 28 fps

Browsermark Score 1,888 ----- 3,758

(full load *vs.* at rest tested using Handbrake, h.264/mpeg4 video, doesn't include monitor)

I performed a variety of benchmarks, such as using Winrar to try to compress a 156 Megabyte video file. This may not have been the best choice of file, since they are already highly compressed, but the resulting times were very close, even though the newer CPU clearly uses a lot less power to do the same job. Hyper Pi, which calculates Pi using as many cores as the CPU possesses, showed a marked improvement over the old Phenom II.

If you'll refer to the chart above, you can see that the A10-7800 has roughly three times as many switches/transistors as the Phenom II 925 did. To put that in perspective, my first computer, a TI 99/4a from about 1982, had a CPU with 8,000 transistors, while my first IBM clone in around 1990 had 275,000. Put another way, let's say that each switch represents a person. In that case, my first PC had close to the equivalent of my home town's population toiling away in there, while today it is roughly the equivalent to the population of Asia. Clearly, it won't be too long before there are more switches in my computer's processor than there are people alive.

I was also able to borrow a "Kill A Watt" energy testing outlet device from my Dad to get some interesting readings. For example, now I know that my monitor uses up about 27 watts, with the PC using another 60W when the system is not doing much of anything at the desktop. Without the monitor, the new A10 based system uses 115 watts when doing mpeg4/h.264 video file encoding, vs 142 watts on the old Phenom II system. With the side of the case cover off, I definitely could hear the APU fan become a bit noisier during the video encoding, (when the processor kicked into 3.9 GHz turbo mode) but it wasn't noticeable at all with the case closed. Considering the performance per Watt used, this would be a great choice for a power limited system — if you want to upgrade capabilities without having to upgrade a system's power supply, for example.

Browsermark showed roughly a doubling of ability, while PCMark 8 showed nearly a quadrupling of casual gaming frames per second. Ultimately, I got what I wanted out of the upgrade — browser games are playable again, with no lag for detailed animations in games and such. The system now also has the capability of playing various games with 3D effects, such as first and third person shooters — something I definitely could not have done on my old system.

It wouldn't be fair to finish this review without at least trying a few games. The A10-7800 was able to handle a game called *King's Bounty* that needed a video card upgrade to play about three years ago, due to numerous rendered battle animations. For the past decade, many of the first and

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third person shooters and other 3D games have used the Unreal Engine. (UE) I downloaded game demos using the UE2, which was used to make many games from about 2003 to 2008, and the system worked flawlessly. I tried another game that was made with UE3, which was used from about 2009 to present, and again, it did a decent job, but not at the highest resolutions.

The next version of the Unreal Engine is UE4, which is currently being used by developers to make games that will come out starting in 2015, and probably for the next 5 years or so. Using a recently released demo of UE4, I was only able to get frame rates of about nine to fourteen frames per second, which is not playable. However, it is still orders of magnitude above what I would have gotten with any motherboard's onboard graphics, and probably about 15% better than a stand-alone R7 240 video card.

To be fair, the UE4 development system is meant to push even high end video cards at this point — cards that probably cost more by themselves than this processor does. It makes sense for them to do this, because it usually takes at least a couple of years to develop the games. Also, today's \$350 Radeon R9 or Geforce GTX video cards will be equivalent to a middle of the road \$120 card 3 or so years from now.

APU's such as the A10-7800 are very unlikely to ever interest either of these two groups: overclockers or video card enthusiasts. AMD wasn't going after either of these markets, so it shouldn't be a surprise. What AMD wanted to do was to offer a relatively inexpensive option for people who like to have what you might consider some mid-range graphics built into the processor. Intel has also started doing this, with Intel graphics built in to a number of their processors now. At least for present, AMD definitely has the upper hand as far as video game framerate on these, however. Looking over numerous online benchmarks, I found that the Intel processors could crunch numbers a bit faster, but that the AMD APU's often had double the game framerates. I guess if you spend most of your time compressing files or doing intensive calculations, Intel might be a better choice. However, if anyone in your house plays games, the AMD APU would probably be a better investment.

In a nutshell: I give the A10-7800 a 9.5 out of 10 for energy efficiency and for being able to cram this much video processing ability into an APU. It would probably play 95% of the games out there currently, and you could easily spend \$60 to \$70 on a stand-alone video card that would not outperform this. That said, this is probably a better choice for those who occasionally try first person shooters, considering that it is unlikely to perform well in graphics heavy titles coming out in 2015 and later. For those who leave their PC's on all the time, the savings on an electric bill alone would likely pay for the cost of the A10-7800 in one or two years. This is especially true if your current system has older (released 2010 or before) stand-alone video cards or processors that draw 90W or more.

TDB

[EDITOR'S NOTE: Mr. Woodard is a DMA member who lives in Clayton, Ohio.]

Musings: An Irregular Column

By Steven M. SCHOEMANN

Dayton Microcomputer Association DMA1.org

Steve (at) GemAir.com

LAST MONTH I WROTE ABOUT FLASH DRIVES and how the price has dropped. Little did I know that the day after I submitted my article to THE DATABUS, I would find out about the latest advancement in flash drives. Yes, wireless flash drives are here! The following are some of the device highlights.

It's a SanDisk 32 Gigabyte flash (thumb) drive which sells for under \$50.00 (The 64 Gigabyte version was around \$94.00). I did see some retailers with higher prices on the same item. Product highlights include:

- ⇒ Apple iOS and Android Device Compatible
- ⇒ Windows and Mac OS Compatible
- ⇒ Includes a micro SDHC Memory Card
- ⇒ Wirelessly Store, Share, Stream Content
- ⇒ Supports eight Simultaneous Connections
- ⇒ Supports three Simultaneous Media Streams
- ⇒ Wireless Range up to 150'
- ⇒ USB 2.0 Connection, Charges Via USB
- ⇒ Up to four Hours of Battery Runtime
- ⇒ Wi-Fi (WPA2) Password Protection

Sound too good to be true? How about free shipping included? Personally, I will wait for a review on this product. There may already be a review out there since both of my nephews were aware of the product.

With the price of solid state drives (SSDs) dropping, it is no surprise that some cloud services are starting to install SSDs on their servers. Getting faster response time to their corporate users is something that they can promote as increased value. They can also charge extra for the faster response time.

I would expect that, as prices continue to decrease and usage increases in the workplace, solid state drives will continue to proliferate in the home environment. Generally, I have found that, if people like what they are using at work, they will want similar things for their personal use.

I don't know about you, but I am tired of the lack of security that retailers, banks, and credit card companies have. My best guess is that practically everyone has had to have one or more of their credit or debit cards replaced because of some sort of security breach. Now that Apple, Google and heaven only knows who else are getting into the mobile payment world, what other troubles are we all going to be forced to endure? Of course, every time there is a data breach, we are told that it won't cost us a penny. Supposedly, the companies will absorb the cost. Now, who are we kidding? You and I end up paying for the commercial market's inability to secure data through increased costs for the products and services that they sell.

As the big software companies are developing mobile payment systems, the large retailers are

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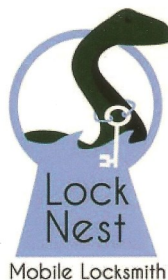
trying to develop their own system called CurrentC, so that they can avoid payments to the banks and *payment* processors. I don't blame them, since it would put a few more percentage points in their pockets. The problem, as I see it, is that their product has already been hacked a few times and it has not even been implemented. What penalties do retailers, banks and software venders get when our personal data have been lost or stolen because of their malfeasance? What I see is that they get off scot-free, since they say the consumer will not be held responsible for any debts incurred. The real question is who will be held responsible?

TDB

[EDITOR'S NOTE: Steve Schoemann is a longtime DMA member from Miami County.]



10% Discount to DMA
members!



Lock Nest Mobile Locksmith

Steve Davis
Owner

P.O. Box 753
Vandalia, OH 45377
937.890.1936

Locknestmobile@gmail.com
www.locknestmobilelocksmith.com

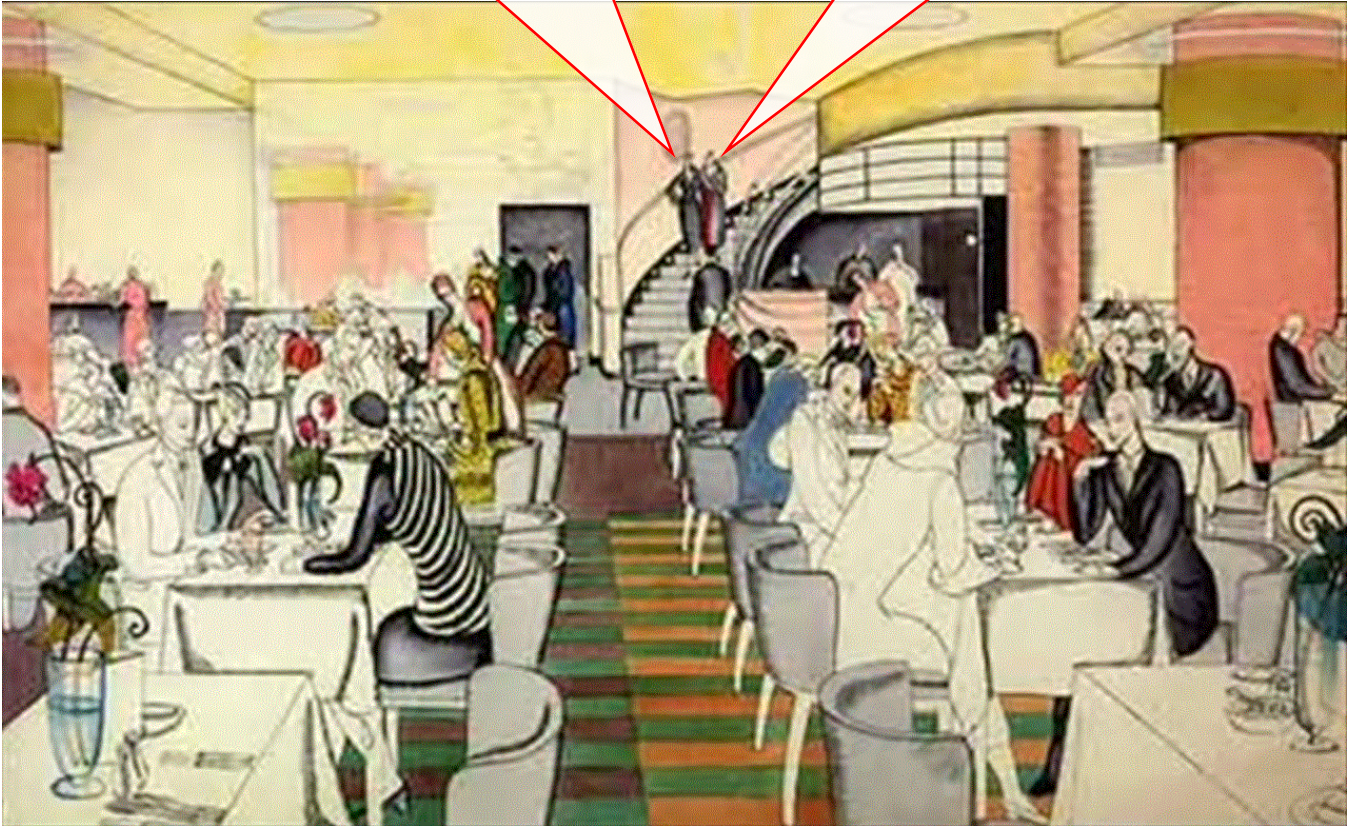


Have a business card? Are you a DMA member?

ANY PAID-UP MEMBER of the Dayton Microcomputer Association is entitled to a *free* business card-sized advertisement in THE DATABUS. Give your card to Editor **Martin Arbagi** to be scanned, or send a good-quality image to Editor@DMA1.org. A link to your Web site (if you have one) can be embedded in the image of your card. Under weird IRS regulations, your site may not include discount coupons, although discount offers may be included in the advertisement itself. (See the example just above, which includes a 10% discount for DMA members.)

By Jove, Harrington, isn't this better than attending the Annual DMA Holiday Dinner at the Spaghetti Warehouse with all those nerds and geeks?

**You IMBECILE—your
💣💣💣ing time machine has put us in
the first-class café
of the TITANIC!!**



- * Poor Harrington is now fish food, but *you* can come!
- * We'll meet on Tuesday, December 9, at The Spaghetti Warehouse, on 5th Street downtown. (Click [here](#) for a map.)
- * Attitude adjustment (cocktails) at 6:00 P.M., dinner at 7.
- * Order from a shortened version of the regular menu. Pay for your own dinner. The \$5.00 ticket cost helps pay for door and grand prizes.
- * Lots of door prizes — almost everyone wins!
- * Tickets available *now* from Glady Campion!

Dayton Microcomputer Association

Events for December 2014

For additions or corrections, contact [Dave Lundy](#)
For details, such as location and contact info, please select Text type display.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 7:00pm DMA Board of Trustees	2	3	4 6:30pm Genealogy SIG	5	6 3:00-5:00pm Classic Computers
7	8 7:00pm Dayton Diode Mtg.	9 6:00pm DMA Holiday Dinner 7:00pm Investment SIG	10 7:00pm Dayton Dynamic Languages Users Group	11	12	13
14	15 Amateur Radio SIG canceled effective Oct. 21, 2014 7:00pm Apple-Dayton SIG	16 7:00pm How-To SIG	17	18 7:00pm Linux SIG	19	20 3:00-5:00pm Classic Computers
21 Winter Solstice	22	23	24	25 Christmas Day	26	27
28	29	30 No DMA Main mtg. - Happy Holidays	31			



Click anywhere on the DMA Calendar (above) to go to the original at DMA1.org.

Please note that the Investment SIG meeting on the 9th, the same day as the Holiday Dinner, has been cancelled.

DMA Membership Application/Renewal

PLEASE ALLOW UP TO THREE WEEKS FOR APPLICATION PROCESSING AND INTERNET SET-UP

Name: _____ Birth date: ____/____/____
mo. day year

Associate Name: _____ Birth date: ____/____/____
mo. day year

Address: _____

City: _____ State: _____ Zip: _____

Phone: (Home) (_____) _____ - _____ (Work) (_____) _____ - _____ x _____

I wish to have my name and address published in the club roster: YES ☐ NO ☐

E-mail address: _____@_____

Name of DMA member who recruited me: _____ (only new regular memberships)

Are you a current or recent DMA Member? Yes q No q Change of Address only? q Today's date: ____/____/____

If you are renewing, please give your Membership Number (from your membership card) _____

Type of Membership

Application is for: New Membership ☐ Membership Renewal ☐ Associate Membership* ☐

If applying for free student membership, please give school name and student ID number: Available only for students under 22 years old. (Student Members *cannot* vote in DMA elections.)

School Name: _____ Student ID#: _____

* A family or associate membership is an additional membership for a member of your immediate family or someone else who is living in the member's household. If this is a family or associate membership, give name of regular member:

Dues/Fees (Dues and Fees are subject to change without prior notice):

Membership (one year — New or Renewal)

1.) ☐ \$25.00

Family or Associate Membership (must live at same address as regular member)

2.) ☐ \$12.50

Free Student Membership for students under 22 yrs of age. (Student Members *cannot* vote in DMA elections.)

3.) ☐ FREE

Please assign me a user ID for E-mail and Usenet news access one-time setup fee for new E-mail accounts.

4.) ☐ \$10.00

Total — Lines 1 and 2 (+ 4 if checked)

5) \$ _____

☐ Cash

☐ Check

Check # _____

Make your check payable to Dayton Microcomputer Association, Inc. (DMA), and then send the check and application to:
PO Box 340402

Beavercreek, OH 45434-0402

DMA Use only: Membership # _____

Exp. Date: ____/____/____

Processed by: _____

REV: 25 November 2013

Click [here](#) to pay your dues
using PayPal. Simplified
Membership Form, too!