Chapter 1

Meet the Eee PC

In This Chapter

- ▶ Not your average laptop
- ▶ Popular Eee PC misconceptions
- ▶ Reviewing Eee PC models
- ▶ Selecting an Eee PC
- ▶ Purchasing an Eee PC

his chapter introduces you to the ASUS Eee PC. (Eee PC is pronounced with a single E, not multiple EEEs, as in "Eeek, a mouse!") If you're wondering where all those Es came from, it's from a marketing campaign that states the computer is "Easy to learn, easy to work, and easy to play."

In this chapter, I tell you what the Eee PC is — and just as important, what it isn't. I then list available models, describe their specifications, and conclude by giving you tips on selecting and purchasing an Eee PC.

Eee PC: Not Your Average Laptop

The Eee PC (see Figure 1-1) has been called a mini-laptop, a subnotebook, a *Mobile Internet Device* (MID), and a *netbook* (a catchy marketing buzzword for small, Internet-centric laptops). Whatever you call it, the Eee PC is a shrunkdown, lightweight laptop that has these key features:

✓ Small — At just a bit over two pounds and roughly the size of this book, the 7-inch and 8.9-inch screen models are designed to be go-anywhere, do-anything personal computers. To fit in such a small package, keys on the Eee PC are smaller than those found on a typical laptop keyboard — right around 83 percent of normal. After you get used to the small size it's possible to touch type with some practice. ASUS also offers several Eee PC models with larger cases (weighing around three pounds) that feature more usable keyboards — around 95 percent of normal size.



- To see how the Eee PC compares in size to other laptops, visit a great Web site called sizeasy (http://sizeasy.com) that compares physical dimensions of various products. Do a search for Eee PC.
- ➤ Easy to use The Eee PC comes with a version of Linux that features a simple Linux user interface it's great for kids or adults with limited computer experience. Don't let the big icons and child-like appearance fool you, however, because the full Linux operating is available under the hood. Eee PCs with Microsoft Windows XP are also available. (Although it's possible for a user to load her own copy of Vista on an Eee PC, the current models just don't have enough processor horsepower to run Microsoft's latest operating system.)
- ✓ **Quick power up and shutdown** With the preinstalled version of Linux, the Eee PC boots up and is ready to use in less than 30 seconds and shuts down in about half that amount of time. The laptop accomplishes this by doing two things:
 - Using a Solid State Drive (SSD) Instead of relying on spinning platters found in standard hard drives, an SSD uses memory to store data. SSDs don't have any mechanical parts making them more robust and less prone to failure. They start up and power down very quickly, are quiet, and have fast read and write times. SSDs are the wave of the future for laptops, but at present they are more expensive than traditional hard drives. (ASUS has also recently added conventional hard drive models to its mini-laptop line.)
 - Loading a simplified user interface version of Linux The simple Linux interface doesn't require very many system resources and loads rapidly. In addition, some processes are still loading in the background when the interface comes up and is ready to use.
- ✓ Expandable The Eee PC features three USB 2.0 slots, a Secure Digital (SD) card reader, and a VGA video out port. On most models, internal memory can be expanded.
- ✓ **Internet-enabled** The Eee PC has an 802.11 b/g wireless card (some models feature 802.11 b/g/n wireless) and an Ethernet jack that makes accessing the Internet a snap.
- ✓ Entertainment-ready Sound card, built-in speakers, and microphone (as well as jacks for external speakers and microphone), a Web cam (on most models), and a processor and graphics chip capable of playing videos turn the Eee PC into a portable entertainment device.
- ✓ Lots of useful, preinstalled software The Linux version of the Eee PC comes installed with all the software you need including:
 - Open Office
 - Firefox (Web browser)

- Thunderbird (e-mail)
- Acrobat Reader (PDF viewer)
- Amarok (a music player)
- Pidgin (an IM client)
- Skype (Internet phone calls)
- MPlayer (a media player)
- A photo manager
- Graphics programs
- Educational programs
- Several utilities

The Windows XP version comes with everything that's normally included with Windows in addition to Microsoft Works, Star Office, and a few other utility programs.

✓ **Affordable** — Even with all its features, the Eee PC is designed to be a low-cost, affordable computer. Depending on its features, models are available from around \$250 to \$600.



Figure 1-1: The Eee PC.

Who's ASUS?

Eee PCs are manufactured by ASUS (pronounced ah-sooss). ASUSTek (www.asus.com) is a Taiwan-based company that makes computer components, peripherals, cell phones, PDAs, and notebook computers. The firm has been around since 1989, and its name

comes from Pegasus, the mythological winged horse. In addition to its own products, the company also produces components for Sony (PlayStation), Apple (iPods and MacBooks), HP, and Compag.

When you see an Eee PC for the first time, don't let the toy-like appearance of the mini-laptop fool you. This is a real computer, and for the most part it can do just about anything a normal PC can (with a few exceptions, which I discuss later).

Because of its small size and portable nature, the mini-laptop can get a lot of use while on the road or around the house. I find the Eee PC especially useful for the following:

- Checking and sending e-mail
- ✓ Browsing the Web
- ✓ Watching videos
- ✓ Listening to music
- ✓ Instant messaging and Skyping
- Working on word processing and spreadsheet documents when away from a primary computer
- ✓ Viewing digital photos
- ✓ Traveling (especially on airplanes, trains, and buses)

Popular Eee PC Misconceptions

If you read the preceding section, you should have a pretty good idea of what the Eee PC is. But how about what it isn't? To set the record straight, I'd like to spend a moment or two discussing popular misconceptions about the minilaptop. In no particular order, here is what the Eee PC wasn't meant to be:

Eee PC and the OLPC XO

The origins of the Eee PC can be traced to the One Laptop Per Child (OLPC) initiative started by Nicholas Negroponte. OLPC's (www.laptop.org) goal was to design an educational laptop that would cost \$100 and make it available to children throughout the world; especially those in developing countries. The result was the OLPC XO-1, a technologically advanced Linux mini-laptop with a user interface called Sugar, expressly developed for kids and education.

Unfortunately, the \$100 price point has yet to be realized, and various politics have mired down OLPC's ambitions (the project may get a jump start, however, with Microsoft's recent announcement that Windows XP would be available on the XO-1). On a positive note, the OLPC project spurred interest in small, functional, inexpensive laptops, which led to the Eee PC and a growing number of similar computers.

- ✓ Your primary computer The Eee PC isn't a replacement for your primary desktop PC or laptop. On most Eee PC models, the screen and keyboard size, slower processor, and limited internal storage space pale in comparison to current PCs. Think of the Eee PC as a secondary or accessory laptop versus a primary computer even new Eee PC models with larger keyboards, screens, and drives are limited by a relatively slow processor (performance of the Intel Celeron and Atom chips are comparable).
- ✓ **An oversized PDA** An Eee PC is a real computer. Unlike Palms, Pocket PCs, and smart phones, it can run most Linux and Windows programs.
- ✓ Yet another cheap laptop I've often heard, "Why buy an Eee PC when I could get a real laptop for the same price or a little more?" Yes, in the same general price range you can buy a cheap, full-size laptop that has a DVD drive, more memory, a real keyboard, a large screen, and more storage. But this is like comparing apples and oranges. The Eee PC is designed to be used in places where lugging around a six pound plus, full-size laptop is a hassle.
- ✓ A high-horsepower workstation or gaming machine The processor and graphics card inside the Eee PC really don't have enough oomph to play graphics-intensive games or perform tasks such as video editing or complex image rendering.

Eee PC Models

When the Eee PC was first introduced in the fall of 2007, only a handful of models were available. Now a year later, you can choose from over a dozen Eee PC models — and according to the rumor mill, even more are on the way.

ASUS has been incredibly aggressive in announcing and releasing new models, and it can be a little bewildering trying to keep track of them all. To help you sort through what's available, here is a brief overview of all models currently on the market. For quick reference, Table 1-1 provides the basic specifications and prices, and Table 1-2 lists key features by model.



Be sure to check the ASUS Eee PC Web site at http://eeepc.asus.com for the latest information on available models and specifications — just in case some new mini-laptops are introduced after this book goes to press.



The prices I list are in U.S. dollars and are current as of the summer of 2008. I wouldn't be surprised to see prices drop because of increased competition in the mini-laptop market. These days, just about everyone is offering his own version of an Eee PC-type laptop.

Eee PC 2G Surf

The Eee PC 2G (as in 2GB for the drive) Surf is the most basic and inexpensive Eee PC. It runs Xandros Linux (check out the "Linux, Xandros, KDE, and Windows" sidebar in Chapter 11 for more information) and comes with a 7-inch screen, a 900 Mhz Celeron processor, 512K of non-expandable RAM, and a small 2GB Solid State Drive. It doesn't have a Web cam and uses a fairly low-capacity battery (expect about 2 hours, 45 minutes of run time). It is available in white, black, blue, green, and pink. Retail price is \$299.



ASUS formerly called the Eee PC 2G Surf the 700 model and designated the Eee PC 4G, 4G Surf, and 8G mini-laptops as the 701 models. If you see references to these numbers on the Internet, you'll know what people are talking about.

Eee PC 4G Surf, 4G

These models have the same case, keyboard, screen, and processor (although running at a slightly higher clock speed), as the Eee PC 2G, but offer expanded hardware — at a higher price point. The Eee PC 4G series have socketed RAM — which means memory can be expanded from the default 512K up to 2GB. Multiple colors are available, and you have your choice of either Linux or Windows XP. Models in the series include

- ✓ Eee PC 4G Surf Similar to the 2G Surf, including the low-capacity battery, but with a 4GB Solid State Drive (SSD) and expandable memory.
- ✓ **Eee PC 4G** 4GB SSD, Web cam, and higher capacity battery with a run time of around 3 hours, 30 minutes. Retail price is \$349.



If you see references to an Eee PC 8G model on the Internet, this is a discontinued Eee PC 4G that comes with an 8GB SSD, 1GB RAM, Web cam, and higher-capacity battery.



The Eee PC is like most computers in that advertised hard drive size doesn't mean you have that much storage available out of the box. For example on a Eee PC 4G loaded with Linux, I had around 1.3GB of free space available, with the operating system and installed applications taking up the remainder of the space.

Eee PC 701SD

The Eee PC 701SD has the same specifications as the Eee PC 4G, but comes with an 8GB internal SSD and a 30GB USB external drive. If that's not enough space for you, ASUS also provides 10GB of online storage.

Eee PC 900 series

One of the downsides to Eee PC 2G, 4G, and 701 models is the tiny 7-inch (800-x-480) screen. Sure it's usable, but a little more screen real estate is nice, especially when browsing the Web.

ASUS bumped up the screen size in the 900 Eee PC series. The 900 models have an ever so slightly larger case, but retain most of the same features as the 7-inch screen models (including the small keyboard) with these notable exceptions:

- ✓ An 8.9-inch, 1024-x-600 screen
- ✓ 1GB of RAM
- ✓ Expanded drive space
- ✓ Higher resolution Web cam (1.3 versus .3megapixel found in the 701 series)
- ✓ Larger surface touchpad with MultiTouch support

Three Eee PC 900 series models are available:

✓ Eee PC 900 — This is the base model. It comes with a 4GB primary SSD and a second SSD for storage (20GB for Linux models, 12GB for Windows XP models). Retail prices range from \$499 to \$549 depending on model.

- ✓ Eee PC 900 16G This model comes with a single 16GB SSD initial reports seem to indicate the drive isn't as speedy as the SSD found in the base model 900. Linux and Windows XP models are available, priced around \$349.
- ✓ Eee PC 900A The 900A is a Linux-only Eee PC. It features an energy efficient Intel Atom processor instead of the Celeron processor found in the other 900 series models. 8GB and 16GB of SSD storage are available. It uses a lower-cost .3-megapixel camera. The price of this new model has yet to be released.

Table 1	I -1	Eee PC	Models — B	asic Spec	ifications	
Model	Memory	Drive Space	Processor	Screen	os	Price
2G Surf	512K	2GB SSD	800 MHz Celeron M	7", 800x 480	Linux	\$249
4G Surf	512K	4GB SSD	900 MHz Celeron M	7", 800x 480	Linux or Wind- ows XP	\$299
4G	512K	4GB SSD	900 MHz Celeron M	7", 800x 480	Linux or Wind- ows XP	\$349
701SD	512K	8GB SSD, 30GB exter- nal	900 MHz Celeron M	7", 800x 480	Linux or Wind- ows XP	*
900	1GB	12GB SSD (Wind- ows)	900 MHz Celeron M	8.9", 1024x 600	Linux or Wind- ows XP	\$499 to \$549
		20GB SSD (Linux)				
900 16G	1GB	16GB SSD	900 MHz Celeron M	8.9", 1024x 600	Linux or Wind- ows XP	\$349
900A	1GB	8 or 16GB SSD	1.6 GHz Intel Atom	8.9", 1024x 600	Linux	*

Model	Memory	Drive Space	Processor	Screen	0S	Price
901	1GB	12GB SSD (Wind- ows)	1.6 GHz Intel Atom	8.9", 1024x 600	Linux or Wind- ows XP	\$ 499
		20GB SSD (Linux)				
904HD	1GB (Wind- ows)	80GB HD	900 MHz Celeron M	8.9", 1024x 600	Linux or Wind- ows XP	*
	2GB (Linux)					
1000	1GB	40GB SSD	1.6 GHz Intel Atom	10", 1024x 600	Linux	\$599
1000 H	1GB	80GB HD	1.6 GHz Intel Atom	10", 1024x 600	Wind- ows XP	\$475
1000 HD	1GB (Wind- ows)	80GB HD	900 MHz Celeron M	10", 1024x 600	Linux or Wind- ows XP	*
	2GB (Linux)					

^{*} ASUS hasn't announced prices for these new models as this book goes to press. See the "Purchasing an Eee PC" section at the end of this chapter for several online retail sites you can check for current prices.

Eee PC 901

Shortly after ASUS released the Eee PC 900 model in late spring of 2008, the company announced the Eee PC 901 (see Figure 1-2). This is a second generation Eee PC with the same basic features as the 900, but with these additions:

[✓] A new case (similar dimensions, but with a more upscale look including metal trim and a redesigned hinge).

[✓] Built-in Bluetooth.

- ✓ 1.6 GHz Intel Atom processor (lower power consumption with roughly the same performance as the 900 MHz Celeron).
- ✓ 802.11b/g/n wireless card (faster speeds, greater range, better connectivity).
- Improved speakers.
- Enhanced touchpad.
- Additional function keys.
- ✓ 20GB of online, Internet storage
- ✓ Power-mode control (Super Hybrid Engine) that allows you to change the processor's speed to increase battery life.
- ✓ High-capacity battery. (Coupled with the Atom chip, expect battery life in the 4.5 to 5 hour range with WiFi on.)

For the extra features of an Eee PC 901, expect to pay around \$499.

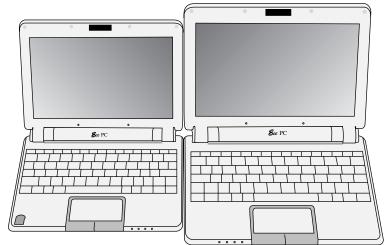


Figure 1-2: 901 (left) and 1000 (right) model Eee PCs.

Eee PC 904HD

During the summer of 2008, ASUS announced plans for a new Eee PC that is a cross between the Eee PC 901 and 1000 models — I discuss the 1000 series next. The Eee PC 904 HD is an Intel Celeron-powered laptop that combines

the 8.9-inch screen of an Eee PC 901 with the case and larger keyboard of the 1000 series. The mini-laptop comes with an 80GB hard drive and is available in Linux and Windows XP models. A price has yet to be announced.

Eee PC 1000 series

Although the 900/901 models addressed the original Eee PC's small screen size, there was still the issue of the undersized keyboard. For some users, the small keys just didn't work.

Responding to customer demand, ASUS upped the ante again, and during the summer of 2008, it announced the Eee PC 1000 (shown in Figure 1-2 next to an Eee PC 901 for size comparison). This model is similar to the 901, but sports a larger 10-inch screen and a bigger, more usable keyboard (about 92 percent the size of a normal PC keyboard).

The 1000 series departs from the small form factor of the original Eee PC, and enters the mainstream subnotebook realm. These laptops are more expensive than their smaller ASUS siblings, but are still priced considerably less than traditional subnotebooks — just keep in mind they also don't have the performance and features typically found in costlier subnotebooks.

Three 1000 series models are currently available:

- ✓ Eee PC 1000 This is the top-of-the-line Linux-only model that comes with a 40GB Solid State Drive. With the larger screen and same size battery, expect run time to be a bit less than the 901. It's priced at \$599.
- ✓ Eee PC 1000 H The H stands for hard drive and this was the first Eee PC to come with a traditional hard drive 80GB to be precise. It's cheaper than the Eee PC 1000 model with the Solid State Drive, is a little heavier, and only comes with Window XP or Linux preinstalled.
- ✓ **Eee PC 1000 HD** The third model in the 1000 series is called the 1000 HD. It's just like the 1000 H with an 80GB hard drive, but instead of an Atom processor, it uses a 900 MHz Celeron CPU (and an 802.11 b/g instead of b/g/n wireless card). Battery life isn't as long, but the lessexpensive hardware components mean a lower retail price.



Eee PCs come in a variety of colors including basic black (ASUS calls it Galaxy black) and a Macintosh-inspired white. Hues of blue, green, pink, and purple are available with some models. Unlike other laptops, your choice of color doesn't influence the price; although some colors tend to be more available than others.

Table 1-2			 	e PC Models — I	Eee PC Models — More Specifications	S	
Model	Cam	Wireless	BT*	Larger Keyboard	Battery	Weight	Dimensions
2G Surf	None	802.11 b/g	No	No	4 cell, 4,400 mAh	2.04 lbs.	$8.9" \times 6.5" \times 1.4"$
4G Surf	None	802.11 b/g	No	No	4 cell, 4,400 mAh	2.04 lbs.	8.9" × 6.5" × 1.4"
46	.3 MP	802.11 b/g	No	No	4 cell, 4,400 or 5,200 mAh	2.04 lbs.	8.9" × 6.5" × 1.4"
701SD	.3 MP	802.11 b/g	No	No	4 cell, 4,400 mAh	1.99 lbs.	8.9" × 6.5" × 1.4"
006	1.3 MP	802.11 b/g	No	No	4 cell, 4,400 mAh	2.19 lbs.	$8.9" \times 6.7" \times 1.3"$
900 16G	1.3 MP	802.11 b/g	No	No	4 cell, 4,400 mAh	2.19 lbs.	8.9" × 6.7" × 1.3"
900A	.3 MP	802.11 b/g	No	No	4 cell, 4,400 mAh	2.19 lbs.	8.9" × 6.7" × 1.3"
901	1.3 MP	802.11 b/g/n	Yes	No	6 cell, 6,600 mAh	2.43 lbs.	8.9" × 6.7" × 1.3"
904HD	.3 MP	802.11 b/g	No	Yes	6 cell, 6,600 mAh	3.09 lbs.	10.5" x 7.5" x 1.5"
1000	1.3 MP	802.11 b/g/n	Yes	Yes	6 cell, 6,600 mAh	3.2 lbs.	10.5" × 7.5" × 1.5"
1000 H	1.3 MP	802.11 b/g/n	Yes	Yes	6 cell, 6,600 mAh	3.2 lbs.	10.5" × 7.5" × 1.5"
1000 HD	1.3 MP	802.11 b/g	Yes	Yes	6 cell, 6,600 mAh	2.94 lbs.	10.5" x 7.5"x 1.5"
*BT = Bluetooth	th.						

Selecting an Eee PC

With the wide array of available models, if you're interested in an Eee PC, all the choices can leave you a little bewildered.

My first suggestion is to review Tables 1-1 and 1-2 to get a handle on features and specifications of different models. Figure out which features are important to you and narrow down your list from there.

If you're still feeling overwhelmed, here are some general suggestions for selecting an ASUS mini-laptop based on who will be using it:

- ✓ Children The Eee PC 2G and 4G models make a great introductory computer for kids. They're relatively inexpensive and are fairly immune to minor bumps and drops. The smaller keyboard is perfect for little hands.
- ✓ **Students** The first generation Eee PC 4G is still popular with students because of its small size and low price. If your budget allows, I'd look at the Eee PC 901 (or another model that uses the Atom processor), because of its longer battery life and bigger screen Bluetooth is also a plus if you've got a compatible cell phone. Second choice would be the lower-priced Eee PC 900 model.
- ✓ Business people The Eee PC 1000 series and the Eee PC 904HD offer more usably sized keyboards and screens. Keep in mind that with these models you're trading away size and portability refer to Figure 1-2 to see the difference between the Eee PC 1000 and 901 models. If you want small, opt for an Eee PC 901. Go for an Atom processor for increased battery life.
- ✓ Home computer users The Eee PC is a great second computer. If you have a wireless access point at home, the Eee PC's light weight and size make it perfect for accessing the Internet anywhere you want kitchen, patio, bedroom, wherever. It's also convenient to toss in a bag or purse when you head to the coffee shop. If you're on a tight budget, I'd recommend an Eee PC 4G, followed by a Eee PC 900 or 901 if you have a little more to spend the larger screen is better for browsing. If you don't mind a bigger case, an Eee PC 904HD offers a more usable keyboard.
- ➤ Senior citizens For seniors I recommend an 8.9-inch or 10-inch screen model they're much easier on the eyes. A larger keyboard might be a plus, depending on the person. If you're going to be using the minilaptop mostly around home, you can opt for a lower-priced model with a Celeron processor because a power outlet is always nearby.

✓ Techies — Take your pick — depending on how much you've got to spend in your wallet or purse. The Eee PC's hardware and software both lend themselves to tinkering and customization.



You'll still need to decide whether you should get a model that runs Linux or Windows XP. I offer some advice on that decision in Chapter 11.

Purchasing an Eee PC

If you've made up your mind that you want an Eee PC, and are all set to buy a mini-laptop, where should you go to get one? You've got a few options.

The easiest way is to have your credit card ready and use the Internet. Eee PCs can be purchased from a number of large online retailers, including the following:

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✓ Amazon — www.amazon.com
✓ NewEgg — www.newegg.com
✓ Buy.com — www.buy.com
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If you want to check out an Eee PC in person before purchasing, your options are bit more limited. As of yet, ASUS doesn't have an extensive retail distribution network and, depending on where you're located, it may be tough to find an Eee PC for a hands-on evaluation. Larger retailers such as Best Buy (www.bestbuy.com) may stock the mini-laptop, but check around.

Before you buy, I'd suggest using Google to search for other local or online retailers that carry the Eee PC.



Almost a year after the release of the Eee PC, because of their extreme popularity, a fire in a manufacturing facility that makes batteries for ASUS, and a shortage of Atom processors, the diminutive laptops can be scarce in certain markets. Internet retailers frequently sell out quickly and waiting lists are common. With a tight supply and big demand, don't expect to find below-retail bargains. That may be changing in the very near future though. The surprise popularity of the Eee PC has caused just about everyone and their brother to start offering their own mini-laptop models. Competition is already starting to drive prices down and likely will into the future.