IBM System Storage Tape Cartridge 3599 models provide enhanced capacity for enterprise tape drives

Table of contents

At a glance

IBM® System Storage® 3599 Tape Media provides the ability to order IBM 3592 Advanced Data, 3592 Advanced WORM, and 3592 Advanced Economy Tape Cartridge models with the following features:

- Rewritable standard data cartridges of 4.0 TB native physical capacity

- Write-once, read-many (WORM) cartridges of 4.0 TB native physical capacity

- Rewritable economy data cartridges of 500 GB native physical capacity

- Labeled cartridges with the ability to specify a color coded, volume serial number

- Labeled and initialized cartridges with the ability to specify a color coded, volume serial number to save time and labor when adding cartridges to library inventory

Overview

Nine new models of **IBM System Storage 3599 Tape Media** deliver the option to order data cartridges for IBM System Storage TS1140 Tape Drive Model E07 (machine type 3592, model E07). The following 3599 models are available:

- **IBM 3592 Advanced Data cartridge - Type C:** Models 420, 520, and 620 provide up to 4.0 TB rewritable native physical capacity of storage
- **IBM 3592 Advanced Economy cartridge - Type K:** Models 430, 530, and 630 provide up to 500 GB rewritable native physical capacity of storage
- **IBM 3592 Advanced WORM cartridge - Type Y:** Models 440, 540, and 640 provide WORM storage on a 4.0 TB or higher capacity cartridge

These tape media models have cartridge memory in each data cartridge designed to help enhance functionality and reliability of the media. This new advanced, higher capacity tape cartridge media is supported when the IBM System Storage TS1140 Tape Drive Model E07 is integrated or used in the IBM System Storage TS3500 Tape Library (machine type 3584) and standalone rack environments. The latest versions of TS1140 drive microcode and library or subsystem firmware may be required to support the higher capacity IBM 3592 Advanced Data cartridges.

The higher capacity tape cartridges are designed for applications such as archiving and data retention, as well as those applications requiring security or an audit trail. These cartridges work with the IBM System Storage TS1140 Tape Drive to help prevent the unauthorized access, alteration, or deletion of user data, and are supported by the encryption capability in the TS1140 Model E07 Tape Drive and its associated IBM Tivoli® Key License Manager component.

As with previous models, these models deliver flexibility in the specification and ordering of prelabled and initialized data cartridges.

Key prerequisites

These products are only for use with IBM Systems Storage TS1140 Tape Drive Model E07. The latest versions of the TS1140 drive microcode and library or subsystem firmware may be required to support IBM 3592 Advanced Tape Cartridge media.

Planned availability date

July 22, 2011

Description

IBM System Storage 3599 Tape Media provides the ability to order prelabeled, prelabeled and initialized, or bulk-packaged tape data cartridges. These cartridges can be used with IBM System Storage TS1140 Tape Drive Model E07.

Note: The Advanced Data (Type C) cartridges, Advanced Economy (Type K) cartridges, and Advanced WORM (Type Y) cartridges are not supported on legacy J1A, E05, and E06 drives.

The new 3599 models include:

- Model 420 - IBM Tape Cartridges 3592, Advanced Data - Type C, 4.0 TB, in a 20-pack, initialized and prelabeled with starting volume serial information
- Model 520 - IBM Tape Cartridges 3592, Advanced Data - Type C, 4.0 TB, in a 20-pack, prelabeled with starting volume serial information
- Model 620 - IBM Tape Cartridges 3592, Advanced Data - Type C, 4.0 TB, in a 20-pack
- Model 430 - IBM Tape Cartridges 3592, Advanced Economy - Type K, 500 GB, in a 20-pack, initialized and prelabeled with starting volume serial information
- Model 530 - IBM Tape Cartridges 3592, Advanced Economy - Type K, 500 GB, in a 20-pack, prelabeled with starting volume serial information
- Model 630 - IBM Tape Cartridges 3592, Advanced Economy - Type K, 500 GB, in a 20-pack
- Model 440 - IBM Tape Cartridges 3592, Advanced WORM - Type Y, 4.0 TB, in a 20-pack, initialized and prelabeled with starting volume serial information
- Model 540 - IBM Tape Cartridges 3592, Advanced WORM - Type Y, 4.0 TB, in a 20-pack, prelabeled with starting volume serial information
- Model 640 - IBM Tape Cartridges 3592, Advanced WORM - Type Y, 4.0 TB, in a 20-pack

Features of IBM 3592 Tape Cartridges include:

- Cartridge memory built into every data cartridge to help enhance functionality and media reliability by storing access history and media performance information for use by the tape drive every time the cartridge is accessed
- Initialization and prelabeling, with the ability to specify a starting volume serial and color-coding, may help save time and labor when adding new cartridges into the existing inventory

Note: To help promote reliability, use IBM System Storage Tape Cartridges and Tape Cleaning Cartridges which conform to IBM specifications. Additional product information and deliverables can be found on the IBM Storage Media website at

http://www.storage.ibm.com/media

Product positioning

IBM offers a wide range of storage media products to support storage applications ranging from PC products to enterprise-wide mainframe libraries. The IBM System Storage TS1140 Tape Drive is designed to provide high capacity, performance, and reliability across a broad range of computing environments.

IBM Tape Cartridge 3592 media provides rewritable data, WORM, and cleaning cartridges for use in the TS1140 Tape Drive Model E07 that can be purchased from IBM using feature numbers with the initial order of the machine. IBM System Storage 3599 provides a way to order these with a variety of customer-specified options in packaging and labeling. The intent of these options is to:

- Help save time and labor by prelabeling cartridges when adding new cartridges into an existing inventory system
- Allow bulk ordering to help save procurement time and expense

If self-labeling is preferred, Models 620, 630, and 640 provide a way to order bulk cartridges. To save time and labor in labeling cartridges, Models 420, 430, and 440 (labeling and initialization) and 520, 530, and 540 (labeling only) are available to address all aspects of the requirements for data cartridge labeling specifications.

Additional product information and deliverables can be found on the IBM Storage Media website at

http://www.storage.ibm.com/media

Reference information

For information about IBM System Storage 3599 Tape Media Models 420, 430, 440, 520, 530, 540, 620, 630, and 640, refer to Hardware Announcement AG11-0102, dated May 09, 2011.

Product number

```
                                Machine
       Description              type     Model   Feature

       Tape Cart 3592            3599     420
        Labeled and Initialized Data Cartridges - Type C
       Tape Cart 3592            3599     430
        Labeled and Initialized Economy Data - Type K
       Tape Cart 3592            3599     440
        Labeled and Initialized WORM Cartridges - Type Y
       Tape Cart 3592            3599     520
        Labeled Data Cartridges - Type C
       Tape Cart 3592            3599     530
        Labeled Economy Data - Type K
       Tape Cart 3592            3599     540
        Labeled WORM Cartridges - Type Y
       Tape Cart 3592            3599     620
        Data Cartridges - Type C
       Tape Cart 3592            3599     630
        Economy Data - Type K
       Tape Cart 3592            3599     640
        WORM Cartridges - Type Y


       20-Pack 3592 Data Cartridges    3599     420     4211
        - Type C with Labeling and Initialization

       20-Pack 3592 Data Cartridges    3599     420     4221
        - Type C with RFID Labeling and Initialization
```

```
20-Pack 3592 Economy Data          3599      430     4300
 Cartridges - Type K with Labeling and Initialization

20-Pack 3592 Economy Data          3599      430     4310
 Cartridges - Type K with RFID Labeling and Initialization

20-Pack 3592 WORM Data             3599      440     4400
 Cartridges - Type Y with Labeling and Initialization

20-Pack 3592 WORM Data             3599      440     4410
 Cartridges - Type Y with RFID Labeling and Initialization

20-Pack 3592 Data Cartridges       3599      520     5221
 - Type C with Labeling Services

20-Pack 3592 Data Cartridges       3599      520     5231
 - Type C with RFID Labeling Services

20-Pack 3592 Economy Data          3599      530     5300
 Cartridges - Type K with Labeling Services

20-Pack 3592 Economy Data          3599      530     5310
 Cartridges - Type K with RFID Labeling Services

20-Pack 3592 WORM Data             3599      540     5400
 Cartridges - Type Y with Labeling Services

20-Pack 3592 WORM Data             3599      540     5410
 Cartridges - Type Y with RFID Labeling Services

20-Pack 3592 Data Cartridges       3599      620     6200
 - Type C without Labeling and Initialization

20-Pack 3592 Economy Data          3599      630     6300
 Cartridges - Type K without Labeling and Initialization

20-Pack 3592 WORM Data             3599      640     6400
 Cartridges - Type Y without Labeling and Initialization


Alpha prefix background            3599      420,    9003
 - red                                       430,
                                             440,
                                             520,
                                             530,
                                             540
Alpha prefix background            3599      420,    9004
 - yellow                                    430,
                                             440,
                                             520,
                                             530,
                                             540
Alpha prefix background            3599      420,    9005
 - light green                               430,
                                             440,
                                             520,
                                             530,
                                             540
Alpha prefix background            3599      420,    9006
 - light blue                                430,
                                             440,
                                             520,
                                             530,
                                             540
Alpha prefix background            3599      420,    9007
 - gray                                      430,
                                             440,
                                             520,
                                             530,
                                             540
Alpha prefix background            3599      420,    9008
 - orange                                    430,
                                             440,
```

Description			
		520, 530, 540	
Alpha prefix background – pink	3599	420, 430, 440, 520, 530, 540	9009
Alpha prefix background – dark green	3599	420, 430, 440, 520, 530, 540	9010
Alpha prefix background – light orange	3599	420, 430, 440, 520, 530, 540	9011
Alpha prefix background – purple	3599	420, 430, 440, 520, 530, 540	9012
Label background: Color/Vibrant	3599	420, 430, 440, 520, 530, 540	9022
Media identifier letters JC or Type C	3599	420, 520	9035
Media identifier letters JY or Type Y	3599	440, 540	9046
Media identifier letters JK or Type K	3599	430, 530	9052
Label background: White (no color)	3599	420, 430, 440, 520, 530, 540	9077
E3 Format	3599	420, 430, 440	9082
E4 Format	3599	420, 430, 440, 014	9084
First character of VOLSER =0	3599	420, 430, 440, 520, 530, 540	9100
First character of VOLSER =1	3599	420, 430, 440, 520, 530, 540	9101
First character of VOLSER =2	3599	420, 430, 440, 520, 530,	9102

		540	
First character of VOLSER =3	3599	420, 430, 440, 520, 530, 540	9103
First character of VOLSER =4	3599	420, 430, 440, 520, 530, 540	9104
First character of VOLSER =5	3599	420, 430, 440, 520, 530, 540	9105
First character of VOLSER =6	3599	420, 430, 440, 520, 530, 540	9106
First character of VOLSER =7	3599	420, 430, 440, 520, 530, 540	9107
First character of VOLSER =8	3599	420, 430, 440, 520, 530, 540	9108
First character of VOLSER =9	3599	420, 430, 440, 520, 530, 540	9109
First character of VOLSER =A	3599	420, 430, 440, 520, 530, 540	9110
First character of VOLSER =B	3599	420, 430, 440, 520, 530, 540	9111
First character of VOLSER =C	3599	420, 430, 440, 520, 530, 540	9112
First character of VOLSER =D	3599	420, 430, 440, 520, 530, 540	9113
First character of VOLSER =E	3599	420, 430, 440, 520, 530, 540	9114
First character of VOLSER =F	3599	420,	9115

		430, 440, 520, 530, 540	
First character of VOLSER =G	3599	420, 430, 440, 520, 530, 540	9116
First character of VOLSER =H	3599	420, 430, 440, 520, 530, 540	9117
First character of VOLSER =I	3599	420, 430, 440, 520, 530, 540	9118
First character of VOLSER =J	3599	420, 430, 440, 520, 530, 540	9119
First character of VOLSER =K	3599	420, 430, 440, 520, 530, 540	9120
First character of VOLSER =L	3599	420, 430, 440, 520, 530, 540	9121
First character of VOLSER =M	3599	420, 430, 440, 520, 530, 540	9122
First character of VOLSER =N	3599	420, 430, 440, 520, 530, 540	9123
First character of VOLSER =O	3599	420, 430, 440, 520, 530, 540	9124
First character of VOLSER =P	3599	420, 430, 440, 520, 530, 540	9125
First character of VOLSER =Q	3599	420, 430, 440, 520, 530, 540	9126
First character of VOLSER =R	3599	420, 430, 440,	9127

		520, 530, 540	
First character of VOLSER =S	3599	420, 430, 440, 520, 530, 540	9128
First character of VOLSER =T	3599	420, 430, 440, 520, 530, 540	9129
First character of VOLSER =U	3599	420, 430, 440, 520, 530, 540	9130
First character of VOLSER =V	3599	420, 430, 440, 520, 530, 540	9131
First character of VOLSER =W	3599	420, 430, 440, 520, 530, 540	9132
First character of VOLSER =X	3599	420, 430, 440, 520, 530, 540	9133
First character of VOLSER =Y	3599	420, 430, 440, 520, 530, 540	9134
First character of VOLSER =Z	3599	420, 430, 440, 520, 530, 540	9135
Second character of VOLSER =0	3599	420, 430, 440, 520, 530, 540	9200
Second character of VOLSER =1	3599	420, 430, 440, 520, 530, 540	9201
Second character of VOLSER =2	3599	420, 430, 440, 520, 530, 540	9202
Second character of VOLSER =3	3599	420, 430, 440, 520,	9203

		530, 540	
Second character of VOLSER =4	3599	420, 430, 440, 520, 530, 540	9204
Second character of VOLSER =5	3599	420, 430, 440, 520, 530, 540	9205
Second character of VOLSER =6	3599	420, 430, 440, 520, 530, 540	9206
Second character of VOLSER =7	3599	420, 430, 440, 520, 530, 540	9207
Second character of VOLSER =8	3599	420, 430, 440, 520, 530, 540	9208
Second character of VOLSER =9	3599	420, 430, 440, 520, 530, 540	9209
Second character of VOLSER =A	3599	420, 430, 440, 520, 530, 540	9210
Second character of VOLSER =B	3599	420, 430, 440, 520, 530, 540	9211
Second character of VOLSER =C	3599	420, 430, 440, 520, 530, 540	9212
Second character of VOLSER =D	3599	420, 430, 440, 520, 530, 540	9213
Second character of VOLSER =E	3599	420, 430, 440, 520, 530, 540	9214
Second character of VOLSER =F	3599	420, 430, 440, 520, 530, 540	9215

```
Second character of VOLSER =G   3599    420,    9216
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =H   3599    420,    9217
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =I   3599    420,    9218
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =J   3599    420,    9219
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =K   3599    420,    9220
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =L   3599    420,    9221
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =M   3599    420,    9222
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =N   3599    420,    9223
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =O   3599    420,    9224
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =P   3599    420,    9225
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =Q   3599    420,    9226
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =R   3599    420,    9227
                                        430,
                                        440,
                                        520,
                                        530,
                                        540
Second character of VOLSER =S   3599    420,    9228
                                        430,
```

		440, 520, 530, 540	
Second character of VOLSER =T	3599	420, 430, 440, 520, 530, 540	9229
Second character of VOLSER =U	3599	420, 430, 440, 520, 530, 540	9230
Second character of VOLSER =V	3599	420, 430, 440, 520, 530, 540	9231
Second character of VOLSER =W	3599	420, 430, 440, 520, 530, 540	9232
Second character of VOLSER =X	3599	420, 430, 440, 520, 530, 540	9233
Second character of VOLSER =Y	3599	420, 430, 440, 520, 530, 540	9234
Second character of VOLSER =Z	3599	420, 430, 440, 520, 530, 540	9235
Third character of VOLSER =0	3599	420, 430, 440, 520, 530, 540	9300
Third character of VOLSER =1	3599	420, 430, 440, 520, 530, 540	9301
Third character of VOLSER =2	3599	420, 430, 440, 520, 530, 540	9302
Third character of VOLSER =3	3599	420, 430, 440, 520, 530, 540	9303
Third character of VOLSER =4	3599	420, 430, 440,	9304

		520, 530, 540	
Third character of VOLSER =5	3599	420, 430, 440, 520, 530, 540	9305
Third character of VOLSER =6	3599	420, 430, 440, 520, 530, 540	9306
Third character of VOLSER =7	3599	420, 430, 440, 520, 530, 540	9307
Third character of VOLSER =8	3599	420, 430, 440, 520, 530, 540	9308
Third character of VOLSER =9	3599	420, 430, 440, 520, 530, 540	9309
Third character of VOLSER =A	3599	420, 430, 440, 520, 530, 540	9310
Third character of VOLSER =B	3599	420, 430, 440, 520, 530, 540	9311
Third character of VOLSER =C	3599	420, 430, 440, 520, 530, 540	9312
Third character of VOLSER =D	3599	420, 430, 440, 520, 530, 540	9313
Third character of VOLSER =E	3599	420, 430, 440, 520, 530, 540	9314
Third character of VOLSER =F	3599	420, 430, 440, 520, 530, 540	9315
Third character of VOLSER =G	3599	420, 430, 440, 520, 530,	9316

Third character of VOLSER =H	3599	420, 430, 440, 520, 530, 540	9317
Third character of VOLSER =I	3599	420, 430, 440, 520, 530, 540	9318
Third character of VOLSER =J	3599	420, 430, 440, 520, 530, 540	9319
Third character of VOLSER =K	3599	420, 430, 440, 520, 530, 540	9320
Third character of VOLSER =L	3599	420, 430, 440, 520, 530, 540	9321
Third character of VOLSER =M	3599	420, 430, 440, 520, 530, 540	9322
Third character of VOLSER =N	3599	420, 430, 440, 520, 530, 540	9323
Third character of VOLSER =O	3599	420, 430, 440, 520, 530, 540	9324
Third character of VOLSER =P	3599	420, 430, 440, 520, 530, 540	9325
Third character of VOLSER =Q	3599	420, 430, 440, 520, 530, 540	9326
Third character of VOLSER =R	3599	420, 430, 440, 520, 530, 540	9327
Third character of VOLSER =S	3599	420, 430, 440, 520, 530, 540	9328
Third character of VOLSER =T	3599	420,	9329

		430, 440, 520, 530, 540	
Third character of VOLSER =U	3599	420, 430, 440, 520, 530, 540	9330
Third character of VOLSER =V	3599	420, 430, 440, 520, 530, 540	9331
Third character of VOLSER =W	3599	420, 430, 440, 520, 530, 540	9332
Third character of VOLSER =X	3599	420, 430, 440, 520, 530, 540	9333
Third character of VOLSER =Y	3599	420, 430, 440, 520, 530, 540	9334
Third character of VOLSER =Z	3599	420, 430, 440, 520, 530, 540	9335
Fourth character of VOLSER =0	3599	420, 430, 440, 520, 530, 540	9400
Fourth character of VOLSER =1	3599	420, 430, 440, 520, 530, 540	9401
Fourth character of VOLSER =2	3599	420, 430, 440, 520, 530, 540	9402
Fourth character of VOLSER =3	3599	420, 430, 440, 520, 530, 540	9403
Fourth character of VOLSER =4	3599	420, 430, 440, 520, 530, 540	9404
Fourth character of VOLSER =5	3599	420, 430,	9405

		440,	
		520,	
		530,	
		540	
Fourth character of VOLSER =6	3599	420,	9406
		430,	
		440,	
		520,	
		530,	
		540	
Fourth character of VOLSER =7	3599	420,	9407
		430,	
		440,	
		520,	
		530,	
		540	
Fourth character of VOLSER =8	3599	420,	9408
		430,	
		440,	
		520,	
		530,	
		540	
Fourth character of VOLSER =9	3599	420,	9409
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =0	3599	420,	9500
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =1	3599	420,	9501
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =2	3599	420,	9502
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =3	3599	420,	9503
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =4	3599	420,	9504
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =5	3599	420,	9505
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =6	3599	420,	9506
		430,	
		440,	
		520,	
		530,	
		540	
Fifth character of VOLSER =7	3599	420,	9507
		430,	
		440,	

```
                                         520,
                                         530,
                                         540
Fifth character of VOLSER =8    3599    420,    9508
                                         430,
                                         440,
                                         520,
                                         530,
                                         540
Fifth character of VOLSER =9    3599    420,    9509
                                         430,
                                         440,
                                         520,
                                         530,
                                         540

Sixth character of VOLSER is set to "0"
```

Publications

No publications are shipped with the announced products.

Services

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an On Demand Business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

  http://www.ibm.com/services/

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

  http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit

  http://www.ibm.com/services/learning/index.html

Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications
- Width: 109 mm (4.3 in)
- Depth: 125 mm (4.9 in)
- Height: 24.5 mm (0.97 in)
- Weight: 240 g (8.4 oz)

Operating environment

- Temperature: 16° to 32° C
- Relative humidity: 20% to 80%
- Wet bulb: 26° C max.

Hardware requirements

The 3599 Tape Media offers data cartridges fully configured to help address requirements for data cartridge labeling and initialization needs. For the Tape Cartridge 3592 Data, 4.0 TB a 20-pack of data cartridges with one of the three data cartridge labeled and initialized options can be selected:

- Labeled and initialized data cartridges (Model 420)
- Labeled only data cartridges (Model 520)
- Standard data cartridges without labeling or initialization (Model 620)

For the IBM System Storage TS1140 Tape Drive Model E07 that is integrated or used in the IBM System Storage TS3500 Tape Library (machine type 3584) and stand-alone rack environments, the latest versions of TS1140 drive microcode and library or subsystem firmware may be required to support the higher capacity IBM Tape Cartridge 3592 media.

In addition, firmware updates for the TS3500 Tape Library may be downloaded from

http://www-03.ibm.com/servers/storage/support/tape/ts3500/downloading.html

Click on "Downloadable files" and search for IBM TS3500 (3584) UltraScalable Tape Library Firmware.

Refer to each product's Sales Manual for more information.

Order Model 520 for labeled 3592 Data Cartridges that are not initialized. A full selection of label colors and number sequence can be specified, and IBM will label all the data cartridges ordered according to the feature numbers selected. The following items can be specified:

Type: For Models 420 and 520 with cartridge media identifier letters (JC/9xxx)

Label background options: Both Color/Vibrant (9022) and White (9077) are available

VOLSER color choices: All ten background colors are available (#9003 to #9012)

Starting VOLSER sequence number: Select the starting sequence number with the following features:

- First alphanumeric digit (0 to 9 and A to Z): 9100 ('0') to 9135 ('Z')
- Second alphanumeric digit (0 to 9 and A to Z): 9200 ('0') to 9235 ('Z')
- Third alphanumeric digit (0 to 9 and A to Z): 9300 ('0') to 9335 ('Z')
- Fourth numeric digit (0 to 9): 9400 ('0') to 9409 ('9')
- Fifth numeric digit (0 to 9): 9500 ('0') to 9509 ('9')
- Sixth numeric digit is set to '0'

Planning information

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called BIOS), utility programs, device drivers, and diagnostics delivered with an IBM machine) and other software updates in a timely manner from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes; however, you may be charged for that service.

Cable orders

No cables required.

Supplies

For users and remarketers: IBM data media supplies can be ordered directly through AAS using machine type 3599.

IBM data media supplies can be also purchased through Priority Fulfillment Services and its distribution channel in North America, Latin America, and Asia Pacific. These data media supplies can be purchased through Forex Telegistics BV and its distribution channel in Europe, the Middle East, and Africa.

For information about Priority Fulfillment Services distribution channels, call +81-3-3808-8486 in Japan or 1-972-881-0733 outside of Japan.

Security, auditability, and control

This product uses the security and auditability features of host hardware, host software, application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

Volume orders: Contact your IBM representative.

Warranty period

Limited lifetime warranty, free from manufacturing and materials defects for the lifetime of the product, typically ten years.

Warranty service

You can get assistance and arrange for a warranty product replacement with a phone call to one of the numbers listed under support at:

http://www.storage.ibm.com/media

There is no warranty service for this product.

There is no warranty service upgrade nor maintenance service for this product.

Warranty service upgrades

Usage plan machine

No

IBM hourly service rate classification

Not applicable.

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be in good working order.

Field-installable features

No

Model conversions

No

Machine installation

Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

Graduated program license charges apply

No

Licensed internal code and licensed machine code

These products do not contain Licensed Internal Code or Licensed Machine Code.

Educational allowance

A reduced charge is available to qualified education customers. The educational allowance may not be added to any other discount or allowance.

The educational allowance is 15% for the products in this announcement.

Pricing

For all local charges, contact your IBM representative.

AP distribution

```
Country/region             Announce

AP IOT
 ASEAN*                     Yes
 India/South Asia**         Yes
 Australia                  Yes
 People's Republic of China Yes
 Hong Kong S.A.R of the PRC Yes
 Macao S.A.R of the PRC     Yes
 Taiwan                     Yes
 Korea                      Yes
 New Zealand                Yes
Japan IOT
 Japan                      Yes

 *  Brunei Darussalam, Indonesia, Cambodia, Lao People's Democratic
    Republic, Malaysia, Philippines, Singapore, Thailand, and Vietnam
 ** Bangladesh, Bhutan, India, Sri Lanka, Maldives, Nepal, and
    Afghanistan
```

Trademarks

IBM, System Storage and Tivoli are registered trademarks of IBM Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

Terms of use

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Reference to other products in this announcement does not

necessarily imply those products are announced, or intend to be announced, in your country. Additional terms of use are located at:

http://www.ibm.com/legal/us/en/

For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page

http://www.ibm.com/planetwide/