

When I add 1GB memory Modules to my G540 server I cannot see all the memory?

This happens if you mix Dual Rank and Single Rank 1GB memory modules in the wrong order. Originally all 1 GB FBD DDR2 667 ECC memory modules used on the G540 were Dual Rank memory modules. However, since 30th October 2008 all 1GB FBD Memory modules used in production have changed to Single Rank Memory Modules. So all G540s with 1 GB memory modules inside with a Manufacturing date of WWK 45 or after from 2008 have the Single Rank memory. This also applies to the Server Option below :-

SO.FB1GB.M01	1GB FBD DDR2 667, ECC , D-Rank (G540-R520-R720-R920)
--------------	--

When populating the memory inside the G540 server and you have a mixture of Single Rank and Dual Rank 1GB memory modules you need to follow the below sequence :-

G540 Dual/Single rank Nanya memory module order population chart								
Memory slot	A1	A2	B1	B2	C1	C2	D1	D2
population order	S	D	S	D	S	D	S	D
	D	S	D	S	D	S	D	S
	S	S	S	S	D	D	D	D
	D	D	D	D	S	S	S	S
	D	S	D	S	S	S	S	S
	S	D	S	D	S	S	S	S
	S	S	S	S	D	S	D	S
	S	S	S	S	S	D	S	D
	S	D	S	D	D	D	D	D
	D	S	D	S	D	D	D	D
	D	D	D	D	S	D	S	D
	D	D	D	D	D	S	D	S

(Legend: S=Single Rank, D=Dual Rank)

To physically identify which module is Single or Dual Rank, please look at these pictures and also the P/N listed below:

D-Rank

Vendor P/N: NT1GT72U8PA3BD-3C

Acer Spare P/N: KN.1GB03.013

Description: FBD, 1GB ECC DDR2 667 Nanya, 64x8x18 CL5

You can see the Dual Rank technology signified on the label of the memory module by 2Rx8 as shown below :-



S-Rank

KN.1GB03.027 NT1GT72U89D1BD-3C FBD, 1GB ECC DDR2 667 Nanya, 128Mx8/9

Vendor P/N: NT1GT72U89D1BD-3C

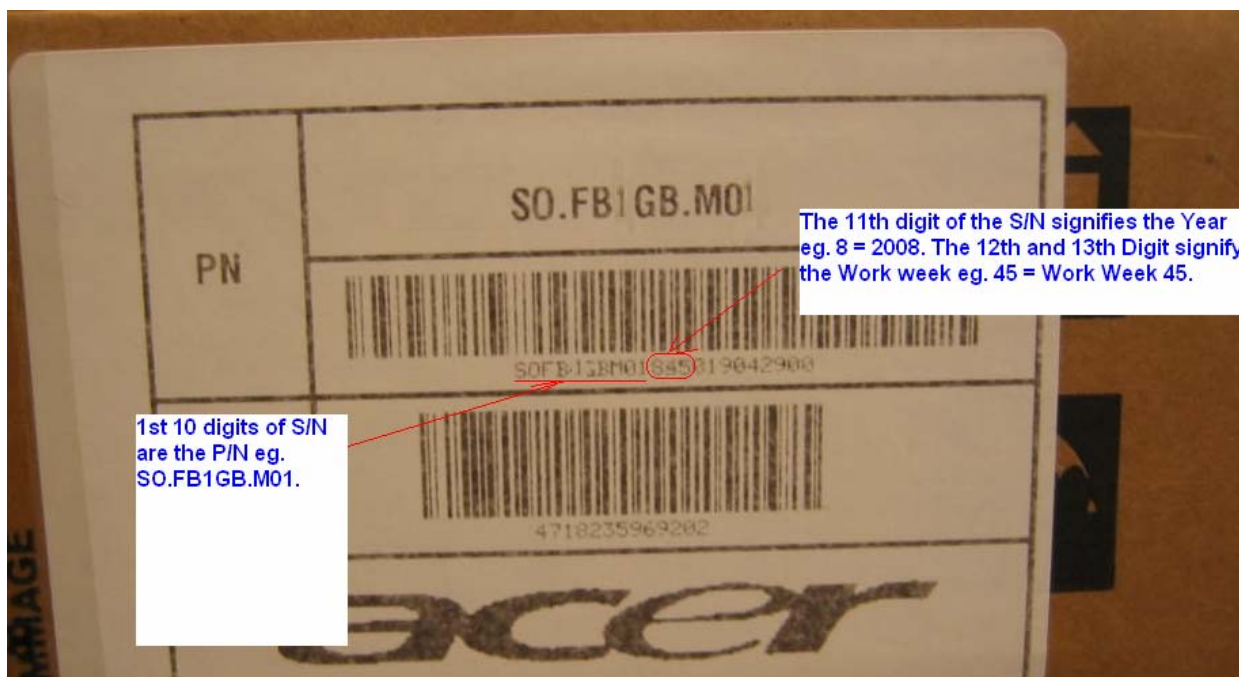
Acer Spare P/N: KN.1GB03.027

Description: FBD, 1GB ECC DDR2 667 Nanya, 128Mx8/9

You can see the Single Rank technology signified on the label of the memory module by 1Rx8 as shown below :-



To identify from the S/N label on the NT options Box for the memory module just reference the Date code :-



So if the Manufacturing Date is 2008 Wk 45 or later, then you know for sure that the 1GB Memory module inside the Server Option SO.FB1GB.M01 is a Single rank memory module.

To identify which 1GB memory module is inside the server from the Server S/N just reference the Manufacturing date as well. So take for example the following G540 server SKU in the pricelist :-

TT.G54E0.030	Altos G540 Xeon DC E5205 1.83GHz/1066 MHz/6MB, 1x1GB FBD 667, 1xSAS/SATA HDD cage (4
--------------	--

If you look at the S/N of the server, the 11th, 12th and 13th Digit signify the Manufacturing Date. Hence a S/N of TTG54E0030**845**019042900 would mean that there is a Single Rank memory module inside, as it was produced after the introduction of the Single Rank memory module which was 30th October 2008.