EPROM/EEPROM Programming For the SUPERPRO Model 3000U

- 1. Flip the power switch on the SUPERPRO 3000U programmer to the ON position.
- 2. Ensure that the USB cable is connected to the computer.
- 3. Open the application named 'EEPROM Programmer.'



4. Select the device you are programming for by clicking the 'Device' button in the upper right-hand portion of the screen:

SUPERPRO SP3000U - SUPERPRO for Windows							
Eile Buffer Device Option Project Handler <u>H</u> elp							
Load Save Load Prj - Save Prj ?							
O Device ATMEL AT27C256R@SOIC28 8000H*8 28Pins E/EPROM	•						
Select Device Ecksum: 0072539BH File = C:Documents and Settings\TA\Desktop\mon_v2_4.s19	•						

NOTE: If you are using the Atmel AT27C256R DIP package, select the AT27C256@SOIC28. After clicking OK, a popup window will tell you that you need a special adapter. You may ignore this. The SOIC and DIP packages have the same pin outs.

5. Click the 'Load' button located in the upper right-hand portion of the screen. Locate and select the s19 monitor file currently being used for the class such as mon_v2_4.s19 or later.

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File Buffer Device Optio							
Load Save	Load						
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🛍 Buffer	Checks						
Operation Option							

6. In the proceeding popup window, select:

File Type: Motorola File Mode: Normal Buffer Address: 0 File Address: 0 Buffer clear on data load with ##: <u>UNCHECKED!!!!</u> Show Offset Address (Minimize) after Loading: unchecked

NOTE: It is very important to UNCHECK the Buffer clear box otherwise you will have to 'Load' the monitor s19 file after every successive programming of a EPROM/EEPROM. The only major consequence to this is if you are using an EPROM. If the box is checked, you may essentially ruin the EPROM(s) by writing \$FF to every address.

7. Confirm that the file has been successfully loaded into the programmer buffer by clicking on the 'Buffer' button. Scroll down the 'Buffer Edit' window to confirm that the data being written onto the PROM is more than merely \$FF.

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Eile Buffer Devi	ce Option Project Han	dler <u>H</u> elp					
Load Save	Load Prj 🝷 Save Prj	8					
🐼 Device	ATMEL AT27C256R@S	DIC28 8000H*8 28Pi	ns EÆPROM				
Buffer Checksum: 0072539BH File = C:VDocuments and Settings\TA\Desktop\mon_v2_4.s19							
Operation Edit B	uffer Edit Auto	Dev. Config	Parameter	Dev. Info	Adapter	Data Compare	

Buffer Edit																
ADDRESS								HEX								ASCII
00005FC0	FF	FF	FF	FF	FF	FF	FF	FF-FF	FF	FF	FF	FF	FF	FF	FF	
00005FD0	FF	FF	FF	FF	FF	FF	FF	FF-FF	FF	FF	FF	FF	FF	FF	FF	
00005FE0	FF	FF	FF	FF	FF	FF	FF	FF-FF	FF	FF	FF	FF	FF	FF	FF	
00005FF0	FF	FF	FF	FF	FF	FF	FF	FF-FF	FF	FF	FF	FF	FF	FF	FF	
00006000	CF	0B	FF	16	F4	10	16	F3-9B	CE	0B	DF	7E	08	64	86	.0.0.000.~Dd.
00006010	06	7A	08	51	86	03	7A	08-54	87	7A	08	70	86	OA	CE	DzDQ.DzDT.zD .D.
00006020	08	55	C7	6B	00	08	43	26-FA	96	13	84	F3	5A	13	96	DU.k.DC&DZD.
00006030	OA	8A	04	5A	OA	96	6F	84-80	27	03	06	80	00	16	EB	D.DZD.o'DDD.
00006040	C8	CD	EO	9D	16	F3	DB	86-3E	16	F3	D4	86	20	16	F3	
00006050	D4	CE	08	68	C6	14	16	EB-EA	16	E2	49	02	8E	08	68	oh.ooo.io.oh
00006060	27	DF	15	00	20	DB	4D	6F-6E	69	74	6F	72	20	76	32	'.DMonitor v2
00006070	2E	34	20	28	63	29	32	30-30	32	20	52	57	4F	2F	50	.4 (c)2002 RWO/P
00006080	4F	4D	2F	55	2F	4A	53	2E-20	46	6C	6F	72	69	64	61	OM/U/JS. Florida
00006090	20	28	41	42	20	32	30	30-35	29	OD	OA	00	OD	OA	00	(AB 2005) 00.00.
000060A0	4F	6C	64	20	76	61	6C	75-65	3A	20	00	OD	OA	57	61	Old value: .DDWa
000060B0	69	74	69	6E	67	20	66	6F-72	20	53	31	39	20	64	6F	iting for S19 do 🔽
Address: 00005FC0H Checksum: 0072539BH Buffer clear at IC Change Buffer range: 00000000H - 00007FFFH Buffer save when exit																
Locate	Co	yqq	1	Fi	11	1	Sea	rch	Sea	arci	h Ne	ext	Ĭ	Ra	dix	Swap OK

- 8. Physically place the PROM at the very bottom of the programmer with the pin 1 dot and chip notch facing up as indicated by the drawing on the SUPERPRO programmer. The programmer is very good about notifying you if the PROM is in the wrong slot, but not if it's backwards.
- 9. Double check that you have selected the correct device and loaded the s19 monitor file.
- 10. Click the 'Program' button.



11. After the programming is complete, confirm the contents of the PROM by comparing it to what's in the buffer. Click 'Data Compare'.

	-D LogicTest	
	•	
	•	
Adapter	Data Compare	
	Compare data of buffer and	chip and save to a file.

- 12. After the 'Data Compare' is complete, open the file C:\SP3000U\bin\27256.cmp (if you're programming the AT27C256) or whatever other file is specified in the SUPERPRO terminal window.
- 13. If the .cmp file says the Buffer and Data are the same, then you have successfully programmed your PROM. You may choose to confirm this by comparing a blank or un-programmed PROM with the Buffer. You will see then, that the .cmp file is much more descriptive; displaying every address with data where the Buffer and the PROM differ.