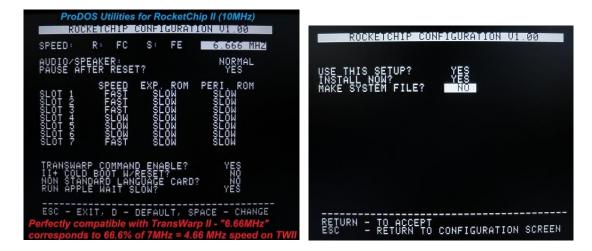
Fine-tuning the speed of TransWarp II

The built-in control panel of the TransWarp II only allows a choice of two accelerated speeds - 7 MHz & 3.5 MHz. All is not lost, however, as the TWII is compatible with the *RocketChip Utilities* (found <u>HERE</u>). This permits fine-tuning the speed in small increments, anywhere from a fraction of 1MHz right up to full throttle!

(Full credit to Glynne Tolar for making the connection - refer <u>HERE</u>)



It's probably easiest to use the RocketChip Utilities designed for the 10MHz RocketChip II (ProDOS version shown above). In this example I have it configured for "6.66MHz" which corresponds neatly to 66.6% of top speed. So on the TransWarp II, 66.6% of 7MHz equates to 4.66MHz

Exiting the RocketChip configurer dumps you to BASIC.SYSTEM with your speed setting intact. However, rebooting with PR#6 or CTRL-OA-RESET on a TransWarp II will undo your speed *(it reverts to stock 3.5MHz or 7MHz, whichever is closest to your custom setting)*. One workaround is to use something like BOOT6.SYS shown in the example below (poached from Zip Chip Utilities <u>HERE</u>). This bypasses the TWII firmware, preserving your speed whilst booting up the next disk...

	ess any key to BOOT Slot 6 ESCape to return to selector
For the spe OA-RESET use someth	RocketChip configurer leaves you in BASIC. ed settings to stick, DON'T use PR#6 or CTRL- to reboot as this will undo the changes. Instead, ning like BOOT6.SYS shown here (culled from Zip se disk) to reboot.

File Edit Actions Tools Help								
6 1008 <u>" "" " </u>		1	91719 87-1					
Pathname /	Туре	Aux	Mod Date	Format	Size	Ratio	Packed	Access
ROCKETCHIP	DIR/	\$0000	18-Feb-94 12:02	ProDOS	2048	100%	2048	dnbwr
AW.PATCHER	SYS	\$2000	02-Jun-89 02:21	ProDOS	0	100%	0	dnbwr
BASIC.SYSTEM	SYS	\$2000	13-Feb-92 01:00	ProDOS	10240	100%	10240	dnbwr
BOOT6	SYS	\$2000	23-Feb-88 15:45	ProDOS	156	100%	156	dnbwr
MASTER.SYSTEM	SYS	\$2000	02-Jun-89 01:20	ProDOS	4434	100%	4434	dnbwr
NSC.DRIVER	SYS	\$2000	15-Jul-89 20:19	ProDOS	0	100%	0	dnbwr
NSC.PRODOS	SYS	\$2000	20-Feb-89 08:21	ProDOS	15485	100%	15485	dnbwr
PRODOS	SYS	\$0000	11-Jul-93 15:14	ProDOS	17128	100%	17128	dnbwr
RC	SYS	\$2000	15-Jul-89 20:48	ProDOS	16074	100%	16074	dnbwr
RCMENU.SYSTEM	SYS	\$2000	02-Jun-89 01:57	ProDOS	4298	100%	4298	dnbwr
BOOT6.SYS copied over to RocketChip Utilities from	GiderPress - O:\appi File Edit Actions T	ools Help			Disk Image		ZIP)	
Zip Chip Utilities Disk	Pathname /			Type Aux		Mod Date		Format
	:ZIP			DIR/	\$0000	29-May	07 11:19	ProDOS
	BASIC.SYSTEM			SYS	\$2000	07-Aug-	88 16:54	ProDOS
	BOOT5			SYS	\$2000	23-Feb-	88 15:45	ProDOS
	BOOT6			SYS	\$2000	23-Feb-	88 15:45	ProDOS
	BOOT7			SYS	\$2000	23-Mar-	88 11:50	ProDOS
	BOOIT							
	DISPLAY			BAS	\$0801	03-Nov-	88 20:31	ProDOS

With this approach, I was able to launch Speed Tester (in DOS 3.3 format) and benchmark the TransWarp II running at a non-standard 4.66MHz:-

Enhanced Apple //e clone — TransWarp II @ 4.66MHz (configured with RocketChip Utilities)

Benchmarks generated by Speed Tester are relative to a 1MHz Apple //e FOR-NEXT LOOP TEST 15 SECONDS 4 TIMES FASTER

TEXT-SCROLL TEST 12 SECONDS 3.45 TIMES FASTER

HGR-FILL BASIC TEST 14 SECONDS **4 TIMES FASTER**

ASL COUNTING TEST 29 SECONDS 4.62 TIMES FASTER

HGR-FILL ASL TEST 6 SECONDS 4.5 TIMES FASTER

^ 2017-06-10 by cvxmelody

Further benchmarks available here:-

http://www.cvxmelody.net/AppleUsersGroupSydneyAppleIIDiskCollection.htm#BENCHMARKS