Hacking the Micro Innovations TKB150P Keyboard

Many thanks to Mike Cook from the Parallax forums for much of this information.

The TKB150P operates from 3.3V or 5.0V and sends serial data at 9600,8,N,1 for each key pressed.

The serial output is 0 volts when idle.

If you wish to use the connector here is the pin out:
> Pin 2 (BLACK) (VCC) = +3.3V input to power the keyboard
> Pin 3 (BLACK) (PE3) = Serial data output from keyboard
> Pin 10 (RED) (GND) = Ground (for power and serial data)

(Nice use of the standard color codes…NOT)

Here is the serial data that is sent for each key

KEY	BLUE	PRESS	RELEASE	NOTES
FN		$01	$9E,$9E	Only key that doesn't send $85,$85
q	1	$10	$85,$85	
w	2	$11	$85,$85	
e	3	$12	$85,$85	
r	4	$13	$85,$85	
j	'	$14	$85,$85	Apostrophe
k	"	$15	$85,$85	Double Quote
l	@	$16	$85,$85	
<-		$17	$85,$85	Tab key
PHONE	menu	$18	$85,$85	
SPACE	cap	$19	$85,$85	
TODO	calc	$1A	$85,$85	
DOWN		$1B	$85,$85	Down arrow
d	+	$28	$85,$85	
f	-	$29	$85,$85	
g	=	$2A	$85,$85	
h	:	$2B	$85,$85	
ENTER	tab	$2C	$85,$85	Enter key
LF		$2D	$85,$85	Left arrow
RT		$2E	$85,$85	Right arrow
DATE	apps	$2F	$85,$85	
del		$48	$85,$85	
m	.	$49	$85,$85	Period
n	'	$4A	$85,$85	Single Quote
b	!	$4B	$85,$85	
s	/	$4C	$85,$85	
a	*	$4D	$85,$85	
p	0	$4E	$85,$85	
o	9	$4F	$85,$85	
MEMO	find	$62	$85,$85	
UP		$63	$85,$85	Up arrow
v	?	$64	$85,$85	
c	)	$65	$85,$85	
x	(	$66	$85,$85	
z	$	$67	$85,$85	
i	8	$68	$85,$85	
u	7	$69	$85,$85	
y	6	$6A	$85,$85	
t	5	$6B	$85,$85	