

Designing Embedded Systems with PIC Microcontrollers: Principles and Applications

BOOK CD

CD Contents & Index

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The author gratefully acknowledges the support received from Microchip Technology, and Pumpkin Real-Time Software, in the writing of the accompanying book, and their permission to reproduce some of their software.

For updates and questions on the book and this CD, refer to the support website:

<http://www.embedded-knowhow.co.uk/>

This CD contains four folders, as summarised below.

Folder 1: Pingpong Design Information

Contents

Pingpong design information
Pingpong pcb layout
Pingpong component locations

Notes

See the file *Pingpong Design Information* in the folder for further information.

Folder 2: Derbot Design Information

Contents

Derbot Design Information
Derbot main pcb layout (three files: for solder side, component side, and silk screen)
Derbot hand controller pcb layout (two files: for solder side and component side)
Derbot battery pack pcb layout (one file: for solder side)
Derbot Parts list.
Wheel patterns

Notes

See the file *Derbot Design Information* in the folder for further information.

Folder 3: Example Programs

Contents

There are around 40 example programs in the book. Those that are on the CD are named according to their program example number, with the exception of two that have self-explanatory names (and are not identified as program examples). Full versions of the programs are included in each case.

Book Chapter	“Program Example” no.	Program Name	Target
1,2,3,4	-	-	-
5	5.4	Flashing LEDs	Pingpong
	5.6	Fibonnaci	Simulator
	5.7	Fibonnaci+Storage	Simulator
6	6.1	Int_Demo1	Simulator
	6.3	Int_context	Simulator
	6.6	cntr_demo	Pingpong
7	7.1	Dbt_sw2led	Derbot-16
8	8.1, 8.3	keypad_test	Derbot Hand Controller (lcd)
	8.2	led_disp_tst	Derbot Hand Controller (led)
	8.4	Dbt_blind_Nav	Derbot-16
9	9.1	odometry_test	Derbot-16
	9.3	Dbt_servo_tst	Derbot-16
	9.4	dbt_pwm_qtrr_sinwave	Derbot-16
	-	dbt_pwm_full_sinwave	Derbot-16
	9.5	Dbt_speed_meas	Derbot-16
	9.6	Dbt_speed_control	Derbot-16
	9.7	Dbt_US_test	Derbot-16
10	10.1	sync_ser_demo	Derbot-16
	10.2	Dbt_kybd_echo_mstr	Derbot-16
	10.3	dbt_kypd_echo_slave	Derbot Hand Controller (lcd)
	10.4	Dbt_kybd_echo_async	Derbot-16
11	11.1	Dbt_light_meter	Derbot-16
	11.3	Dbt_light_seek	Derbot-16
12	12.1	Fibo_18	Simulator
13	-	-	-
14	14.2	Fibo_C	Simulator
15	15.1	Sw_to_led_18C	Derbot-18
	15.3	Dbt_blind_Nav_PWM_C	Derbot-18
16	16.1	Dbt_light_seek_c	Derbot-18
	16.2	Strings&chars_c	Derbot-18
	16.3	Dbt_I2C_test_c	Derbot-18 with Hand Controller (lcd)
	16.4	Light_seek_&_disp	Derbot-18 with Hand Controller (lcd)
17	17.3	Flashing LEDs	Derbot-18
18	-	-	-
19	19.1, 19.2	rtos_ex1 (folder)	Derbot-18
	19.3, 19.4	rtos_ex2 (folder)	Derbot-18
	19.5, 19.6	rtos_ex3 (folder)	Derbot-18
20	-	-	-
App. 2	-	Electronic Pingpong	Pingpong

Folder 4: Software

Contents

Design Software Information

MPLAB Ver.7.40

MPLAB Ver.7.40 README documentation

MPLAB C18 Student version, Ver.3.02

MPLAB C18 Getting Started Document

Pumpkin Salvo Real Time Operating System, LITE version (3 files).

Notes

See the file “Design Software Information” for outline guidance on installation.