

Ds30 Loader consist of three separate parts

- PIC® firmware, this is the software that resides in the microcontroller
- Bootloader engine, this part contains vital function for downloading to the firmware
- GUI, this is the frontend to user allowing to easily adjust download settings

## Common features for all three parts

- |                     |             |
|---------------------|-------------|
| ✓ PIC18F            | ✓ PIC18FJ   |
| ✓ PIC24F            | ✓ PIC24FJ   |
| ✓ PIC24H            | ✓ dsPIC30F  |
| ✓ Fully open source | ✓ dsPIC33FJ |
| ✓ Clean code        |             |

## Firmware features

- |                        |                              |
|------------------------|------------------------------|
| ✓ Checksum control     | ✓ Ready to use mplab project |
| ✓ Write verification   | ✓ EEPROM write               |
| ✓ Single fw per family | ✓ Config write               |
| ✓ Easy configuration   | ✓ UART only                  |

## Bootloader engine features

- |                               |                                    |
|-------------------------------|------------------------------------|
| ✓ Written in c#               | ✓ Easy to integrate                |
| ✓ Device reset byt dtr or rts | ✓ Device activation byt dtr or rts |

## GUI features

- |                 |                             |
|-----------------|-----------------------------|
| ✓ Written in c# | ✓ Checks for latest version |
|-----------------|-----------------------------|

# Datasheet

# ds30 Loader

for use with PIC® microcontrollers.

## Firmware details

	PIC18F	PIC18FJ	PIC24F	PIC24FJ	PIC24H	dsPIC30F	dsPIC33F
Flash write	X	X	X	X	X	X	X
Flash write verification	X	X	X	X	X	X	X
EEPROM write	X	n/a	X	n/a	n/a	X	n/a
EEPROM write verification	X	n/a	X	n/a	n/a	X	n/a
Config write	X	n/a	X	n/a	X	X	X
Config write verification	-	n/a	-	n/a	-	-	-
Open source	X	X	X	X	X	X	X
Single fw for all devices	X	X	X	X	X	X	X
UART only	X	X	X	X	X	X	X
Easy configuration	X	X	X	X	X	X	X
Checksum control	X	X	X	X	X	X	X
Bootloader size	<100/160 words	<128 words	<128 words	<128 words	<128 words	<128 words	<128 words
Space occupation	200 / 320B (3/5 pages)	1kB (1 page)	384B (4 rows)	1,5kB (1 page)	1,5kB (1 page)	384B (4 rows)	1,5kB (1 page)

## Supported devices

### *PIC18F*

1220	2320	2480	2620	43K20	4520	4680	6723
1230	2321	24K20	2680	4420	4523	4682	8520
1320	2331	2520	2682	4423	4525	4685	8527
1330	23K20	2523	2685	4431	4550	46K20	8622
13K22	2420	2525	26K20	4450	4553	6520	8627
13K50	2423	2550	4220	4455	458	6527	8628
14K22	2431	2553	4221	4458	4580	6622	8722
14K50	2450	2580	4320	4480	4585	6627	8723
2220	2455	2585	4321	44K20	45K20	6628	
2221	2458	25K20	4331	452	4620	6722	

### *PIC18FJ*

24J10	44J11	64J11	66J15	67J11	85J10	86J50	87J60
24J11	44J50	64J90	66J16	67J50	85J11	86J55	87J90
24J50	45J10	65J10	66J50	67J60	85J15	86J60	87J93
25J10	45J11	65J11	66J55	67J90	85J50	86J65	96J60
25J11	45J50	65J15	66J60	67J93	85J90	86J90	96J65
25J50	46J11	65J50	66J65	83J11	86J10	86J93	97J60
26J11	46J50	65J90	66J90	83J90	86J11	87J10	
26J50	63J11	66J10	66J93	84J11	86J15	87J11	
44J10	63J90	66J11	67J10	84J90	86J16	87J50	

## Supported devices

### **PIC24F**

04KA200 04KA201 08KA101 08KA1021 6KA101 16KA102

### **PIC24FJ**

16GA002	64GA002	64GB108	128GA008	128GB108	192GB108	256GB108
16GA004	64GA004	64GB110	128GA010	128GB110	192GB110	256GB110
32GA002	64GA006	96GA006	128GA106	192GA106	256GA106	
32GA004	64GA008	96GA008	128GA108	192GA108	256GA108	
48GA002	64GA010	96GA010	128GA110	192GA110	256GA110	
48GA004	64GB106	128GA006	128GB106	192GB106	256GB106	

### **PIC24H**

J12GP201	J32GP302	J64GP210	J64GP506A	J128GP206	J128GP504	J256GP610
J12GP202	J32GP304	J64GP210A	J64GP510	J128GP210	J128GP506	
J16GP304	J64GP202	J64GP502	J64GP510A	J128GP306	J128GP510	
J32GP202	J64GP204	J64GP504	J128GP202	J128GP310	J256GP206	
J32GP204	J64GP206	J64GP506	J128GP204	J128GP502	J256GP210	

## Supported devices

### *dsPIC30F*

1010	2020	3012	4012	5015	6012
2010	2023	3013	4013	5016	6013
2011	3010	3014	5011	6010	6014
2012	3011	4011	5013	6011	6015

### *dsPIC33F*

J06GS101	J32GP202	J64GP706A	J128GP202	J128MC708
J06GS102	J32GP204	J64GP708	J128GP204	J128MC710
J06GS202	J32GP302	J64GP710	J128GP206	J128MC802
	J32GP304	J64GP802	J128GP306	J128MC804
J12GP201	J32MC202	J64GP804	J128GP310	
J12GP202	J32MC204	J64MC202	J128GP706	J256GP506
J12MC201	J32MC302	J64MC204	J128GP708	J256GP510
J12MC202	J32MC304	J64MC506	J128GP710	J256GP710
		J64MC508	J128GP802	J256MC510
J16GP304	J64GP202	J64MC510	J128GP804	J256MC710
J16GS402	J64GP204	J64MC706	J128MC202	
J16GS404	J64GP206	J64MC710	J128MC204	
J16GS502	J64GP306	J64MC802	J128MC506	
J16GS504	J64GP310	J64MC804	J128MC510	
J16MC304	J64GP706		J128MC706	