

Example: This example considers a DMX receiver with a start address of 6, and a field size of four slots. It traces the values of key variables after completing each interrupt service when the receiver receives a DMX frame with the following first ten data slots {11,12,13,14,15,16,17,18,19,20,...}.

Sample data including start code: DMX data = {0,11,12,13,14,15,16,17,18,19,20,...}

DMXAddr = 6 (configured start address)

DMXRxFld = 4 Bytes (given receive size).

Variable	Note
gDMXstate	{0=Idle;1=Break;2=StartB;3=StartAddr;}
USART Status	{FE = Break; 0 = Data} - flag triggering ISR
DMXByte	Contents of receive byte from USART
DMXAddr	6 (configured from DIP Switch)
DMXCount	Global slot counter
DMXRxFld[0..1]	Output Array of size 4 bytes

Here is a trace reporting key variable values after completion of the interrupt service routine.

Interrupt causing ISR	DMXByte	gDMXstate	DMXcount	DMXRxFld			
				[0]	[1]	[2]	[3]
Break	N/A	1	6	?	?	?	
Data	0	2					
Data	11						
Data							
Data							
Data							
Data							
Data							
Data							
Data							
Data	...	0	4	16	17	18	19