



**Kyocera Crystal Recommendation for  
Remote Keyless Entry (RKE)**  
For use with Infineon Wireless Control Products

**Transmitter**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+85C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5100	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
	868										
TDA5101	315	9.84375	CX5032SB09843H0xxxxx	+/-10	+/-30	+/-10	3.5	0.9	26.5	100	12
TDK5100	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
	868										
TDK5100F	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
TDK5101	315	9.84375	CX5032SB09843H0xxxxx	+/-10	+/-30	+/-10	3.5	0.9	26.5	100	12
TDK5101F	315	9.84375	CX5032SB09843H0xxxxx	+/-10	+/-30	+/-10	3.5	0.9	26.5	100	12
TDK5110	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
	868										
TDK5110F	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
TDK5111	315	9.84375	CX5032SB09843H0xxxxx	+/-10	+/-30	+/-10	3.5	0.9	26.5	100	12
TDK5111F	315	9.84375	CX5032SB09843H0xxxxx	+/-10	+/-30	+/-10	3.5	0.9	26.5	100	12
TDK5116F	868	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
TDA7100	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
TDA7110	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
	868										
TDA7110F	434	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12
TDA7116F	868	13.56875	CX5032SB13568H0xxxxx	+/-10	+/-30	+/-10	5.1	1.5	17.0	80	12

**Receiver**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+85C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5200	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
	868	13.4015625	CX1255GB13401H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.1		
			CX5032SB13401H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	16.5		
TDA5201	315	10.178125	CX1255GB10178H0xxxxx	+/- 15	+/- 50	+/-20	9.05	2.45	14.1	80	12
			CX5032SB10178H0xxxxx	+/- 10	+/- 30	+/-10	3.3	1.1	32.2		
TDA5210	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
	868	13.4015625	CX1255GB13401H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.1		
			CX5032SB13401H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	16.5		
TDA5211	315	10.178125	CX1255GB10178H0xxxxx	+/- 15	+/- 50	+/-20	9.05	2.45	14.1	80	12
			CX5032SB10178H0xxxxx	+/- 10	+/- 30	+/-10	3.3	1.1	32.2		



**Kyocera Crystal Recommendation for  
Remote Keyless Entry (RKE)**  
For use with Infineon Wireless Control Products

**Receiver, continued**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+85C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5212	915	14.129688	CX1255GB14129H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	12.8	80	12
		14.4640625	CX5032SB14464H0xxxxx	+/- 10	+/- 30	+/-10	5.8	1.6	13.3		
TDA5220	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
	868	13.4015625	CX1255GB13401H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.1		
			CX5032SB13401H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	16.5		
TDA5221	315	10.178125	CX1255GB10178H0xxxxx	+/- 15	+/- 50	+/-20	9.05	2.45	14.1	80	12
			CX5032SB10178H0xxxxx	+/- 10	+/- 30	+/-10	3.3	1.1	32.2		
TDA7200	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
TDA7210	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
	868	13.4015625	CX1255GB13401H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.1		
			CX5032SB13401H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	16.5		
TDA7210V	434	13.234375	CX1255GB13234H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.7	80	12
			CX5032SB13234H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	20.8		
	868	13.4015625	CX1255GB13401H0xxxxx	+/- 15	+/- 50	+/-20	11.3	3.05	14.1		
			CX5032SB13401H0xxxxx	+/- 10	+/- 30	+/-10	5.1	1.5	16.5		
TDA5231	315	15.2671875	CX1255GB15267H0xxxxx	+/- 15	+/- 50	+/-20	14.55	3.75	10.9	80	12
			CX5032SB15267H0xxxxx	+/- 10	+/- 30	+/-10	5.7	1.6	13.0		

**Transceiver**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+85C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5250	868	18.0895833	CX5032SB18089H0xxxxx	+/- 10	+/- 30	+/-10	6.51	1.72	19.0	80	12
TDA5251	315	13.125000	CX5032SB13125R0xxxxx	+/- 10	+/- 30	+/-10	5.0	1.5	25.4	80	20
TDA5252	915	19.062500	CX5032SB19062R0xxxxx	+/- 10	+/- 30	+/-10	5.5	1.45	72.2	80	20
TDA5255	434	18.0895833	CX5032SB18089H0xxxxx	+/- 10	+/- 30	+/-10	6.51	1.72	19.0	80	12
TDA5255	434	18.0895833	CX5032SB18089R0xxxxx	+/- 10	+/- 30	+/-10	6.51	1.72	19.0	80	20
TDA7255V	434	18.0895833	CX5032SB18089R0xxxxx	+/- 10	+/- 30	+/-10	6.51	1.72	19.0	80	20



**Kyocera Crystal Recommendation for  
Tire Pressure Monitoring System (TPMS)**  
For use with Infineon Wireless Control Products

**Transmitter**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+125C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5100	434	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12
	868										
TDA5101	315	9.84375	CX5032SA09843H0xxxxx	+/-10	+/-50	+/-20	3.3	1.05	28.6	100	12
TDK5100	434	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12
	868										
TDK5100F	434	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12
TDK5101	315	9.84375	CX5032SA09843H0xxxxx	+/-10	+/-50	+/-20	3.3	1.05	28.6	100	12
TDK5101F	315	9.84375	CX5032SA09843H0xxxxx	+/-10	+/-50	+/-20	3.3	1.05	28.6	100	12
TDK5110	434	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12
	868										
TDK5110F	434	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12
TDK5111	315	9.84375	CX5032SA09843H0xxxxx	+/-10	+/-50	+/-20	3.3	1.05	28.6	100	12
TDK5111F	315	9.84375	CX5032SA09843H0xxxxx	+/-10	+/-50	+/-20	3.3	1.05	28.6	100	12
TDK5116F	868	13.56875	CX5032SA13568H0xxxxx	+/-10	+/-50	+/-20	5.15	1.45	30.1	60	12

**Receiver**

IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+125C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5200	434	13.234375	CX1255GA13234H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	14.5	50	12
			CX5032SA13234H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	21.0	60	
	868	13.4015625	CX1255GA13401H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	15.5	50	
			CX5032SA13401H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	26.5	60	
TDA5201	315	10.178125	CX1255GA10178H0xxxxx	+/- 15	+/- 100	+/-20	9.05	2.45	11.2	50	12
			CX5032SA10178H0xxxxx	+/- 10	+/- 50	+/-20	3.4	1.15	24.1	100	
TDA5210	434	13.234375	CX1255GA13234H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	14.5	50	12
			CX5032SA13234H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	21.0	60	
	868	13.4015625	CX1255GA13401H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	15.5	50	
			CX5032SA13401H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	26.5	60	
TDA5211	315	10.178125	CX1255GA10178H0xxxxx	+/- 15	+/- 100	+/-20	9.05	2.45	11.2	50	12
			CX5032SA10178H0xxxxx	+/- 10	+/- 50	+/-20	3.4	1.15	24.1	100	
TDA5212	915	14.129688	CX1255GA14129H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	10.5	50	12
		14.4640625	CX5032SA14464H0xxxxx	+/- 10	+/- 50	+/-20	5.3	1.5	41.4	60	
TDA5220	434	13.234375	CX1255GA13234H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	14.5	50	12
			CX5032SA13234H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	21.0	60	
	868	13.4015625	CX1255GA13401H0xxxxx	+/- 15	+/- 100	+/-20	11.3	3.05	15.5	50	
			CX5032SA13401H0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	26.5	60	



**Kyocera Crystal Recommendation for  
Tire Pressure Monitoring System (TPMS)**  
For use with Infineon Wireless Control Products

<b>Receiver, continued</b>											
IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+125C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5221	315	10.178125	CX1255GA10178H0xxxxx	+/- 15	+/- 100	+/-20	9.05	2.45	11.2	50	12
			CX5032SA10178H0xxxxx	+/- 10	+/- 50	+/-20	3.4	1.15	24.1	100	
TDA5231	315	15.2671875	CX1255GA15267H0xxxxx	+/- 15	+/- 100	+/-20	14.55	3.75	11.1	50	12
			CX5032SA15267H0xxxxx	+/- 10	+/- 50	+/-20	5.25	1.5	12.2	60	

<b>Transceiver</b>											
IC	Freq. Band [MHz]	Crystal Freq [MHz]	Crystal Part Number	Adjustment Tolerance [ppm]	Freq. Stability -40/+125C [ppm]	Aging tolerance [ppm]	C1 [fF] (Tolerance +/-20%)	C0 [pF] (Tolerance +/-20%)	Typ. ESR [Ω]	Max. ESR [Ω]	CL [pF]
TDA5250	868	18.0895833	CX5032SA18089H0xxxxx	+/- 10	+/- 50	+/-20	5.9	1.5	12.9	50	12
TDA5251	315	13.125000	CX5032SA13125R0xxxxx	+/- 10	+/- 50	+/-20	5.15	1.45	22.9	60	20
TDA5252	915	19.062500	CX5032SA19062R0xxxxx	+/- 10	+/- 50	+/-20	6.4	1.65	28.3	60	20
TDA5255	434	18.0895833	CX5032SA18089H0xxxxx	+/- 10	+/- 50	+/-20	5.9	1.5	12.9	50	12
	434	18.0895833	CX5032SA18089R0xxxxx	+/- 10	+/- 50	+/-20	5.9	1.5	12.9	50	20