

Date: March 1st, 2007

From: Ronen Cohen

To: Customers and Distributors

Subject: Component Production Cancellation

CTS Electronic Components has initiated a plan to eliminate products utilizing Plastic molded crystal resonators. This will result in the complete discontinuation of crystal resonators from the ATP series. These products ship from the CTS factory in Singapore.

The purpose of this memo is to inform you of these activities and the specific production model purchased by you, so lifetime buys or other arrangements can be made.

Please refer to the attached spreadsheet for reference P/Ns

We will be accepting Non-cancelable, Non-returnable lifetime buys until September 30th, 2007 with delivery on or before December 31st, 2007.

Your CTS customer service representative and sales person are prepared to assist you in this transitional period.

Regards,

Ronen Cohen
Product Manager

CC: Dave Holmes
Veronica Chan

Obsolete ATP (Thermoplastic Crystal) - P/N List

CTS Part Number	Description	Frequency (MHz)	CTS Engineering Code (Catalog Part Number)
ATP036SM	0003.579545 MHz Crystal	3.579540	---
ATP036SM-1	0003.579545 MHz Crystal	3.579540	---
ATP037SM	0003.686400 MHz Crystal	3.686400	---
ATP037SM-1	0003.686400 MHz Crystal	3.686400	---
ATP040SM	0004.000000 MHz Crystal	4.000000	---
ATP040SM-1	0004.000000 MHz Crystal	4.000000	---
ATP042SM	0004.915200 MHz Crystal	4.915200	---
ATP042SM-1	0004.915200 MHz Crystal	4.915200	---
ATP044SM	0004.433619 MHz Crystal	4.433619	---
ATP04ASM	0004.000000 MHz Crystal	4.000000	---
ATP050SM	0005.068800 MHz Crystal	5.068800	---
ATP050SM-1	0005.068800 MHz Crystal	5.068800	---
ATP060SM	0006.000000 MHz Crystal	6.000000	---
ATP060SM-1	0006.000000 MHz Crystal	6.000000	---
ATP061SM	0006.144000 MHz Crystal	6.144000	---
ATP073SM	0007.372800 MHz Crystal	7.372800	---
ATP08ASM	0008.000000 MHz Crystal	8.000000	---
ATP08ASM-1	0008.000000 MHz Crystal	8.000000	---
ATP08BSM	0008.192000 MHz Crystal	8.192000	---
ATP098SM	0009.830400 MHz Crystal	9.830400	---
ATP098SM-1	0009.830400 MHz Crystal	9.830400	---
ATP099SM	0009.830400 MHz Crystal	9.830400	---
ATP099SM-1	0009.830400 MHz Crystal	9.830400	---
ATP100SM	0010.000000 MHz Crystal	10.000000	---
ATP100SM-1	0010.000000 MHz Crystal	10.000000	---
ATP10ASM	0010.000000 MHz Crystal	10.000000	---
ATP10ASM-1	0010.000000 MHz Crystal	10.000000	---
ATP111SM	0011.059200 MHz Crystal	11.059200	---
ATP111SM-1	0011.059200 MHz Crystal	11.059200	---
ATP115SM	0011.520000 MHz Crystal	11.520000	---
ATP120SM	0012.000000 MHz Crsyatl	12.000000	---
ATP122SM	0012.288000 MHz Crystal	12.288000	---
ATP123SM	0012.296000 MHz Crystal	12.296000	---
ATP124SM	0012.296000 MHz Crystal	12.296000	---
ATP126SM	0012.352000 MHz Crystal	12.352000	---
ATP127SM	0012.352000 MHz Crystal	12.352000	---
ATP12ASM	0012.000000 MHz Crsyatl	12.000000	---
ATP135SM	0013.500000 MHz Crystal	13.500000	---
ATP143SM	0014.318180 MHz Crystal	14.318180	---
ATP143SM-1	0014.318180 MHz Crystal	14.318180	---
ATP153SM	0015.360000 MHz Crystal	15.360000	---
ATP153SM-1	0015.360000 MHz Crystal	15.360000	---
ATP160SM	0016.000000 MHz Crystal	16.000000	---
ATP160SM-1	0016.000000 MHz Crystal	16.000000	---
ATP169SM	0016.934400 MHz Crystal	16.934400	---
ATP16ASM	0016.000000 MHz Crystal	16.000000	---
ATP16ASM-1	0016.000000 MHz Crystal	16.000000	---
ATP184SM	0018.432000 MHz Crystal	18.432000	---
ATP18ASM-1	0018.432000 MHz Crystal	18.432000	---
ATP196SM	0019.660800 MHz Crystal	19.660800	---

CTS Part Number	Description	Frequency (MHz)	CTS Engineering Code (Catalog Part Number)
ATP19ASM	0019.660800 MHz Crystal	19.660800	---
ATP200SM	0020.000000 MHz Crystal	20.000000	---
ATP204SM	0020.480000 MHz Crystal	20.480000	---
ATP204SM-1	0020.480000 MHz Crystal	20.480000	---
ATP20ASM	0020.000000 MHz Crystal	20.000000	---
ATP20ASM-1	0020.000000 MHz Crystal	20.000000	---
ATP20BSM	0020.000000 MHz Crystal	20.000000	---
ATP22ASM	0022.118400 MHz Crystal	22.118400	---
ATP22ASM-1	0022.118400 MHz Crystal	22.118400	---
ATP240SM-1	0024.000000 MHz Crystal	24.000000	---
ATP245SM	0024.576000 MHz Crystal	24.576000	---
ATP24ASM	0024.000000 MHz Crystal	24.000000	---
ATP24BSM	0024.576000 MHz Crystal	24.576000	---
ATP25ASM	0025.000000 MHz Crystal	25.000000	---
ATP320SM	0032.000000 MHz Crystal	32.000000	---
ATP32ASM	0032.000000 MHz Crystal	32.000000	---
ATP400SM	0040.000000 MHz Crystal	40.000000	---
ATP40ASM	0040.000000 MHz Crystal	40.000000	---
10185	0032.768000 kHz Crystal	0.032760	CX-1V Package
10343	0032.768000 kHz Crystal	0.032760	K1Z2KD12.5B32k7680
10415	0025.000000 MHz Crystal	25.000000	P1Q56A20B25M0000
10431	0020.000000 MHz Crystal	20.000000	P1Q25A30B20M0000
10432	0025.000000 MHz Crystal	25.000000	P1Q53E18T25M0000
10434	0020.000000 MHz Crystal	20.000000	P1Q53E30B20M0000
10445	0020.000000 MHz Crystal	20.000000	P1Q55A20B20M0000
10446	0020.000000 MHz Crystal	20.000000	P1Q55A20T20M0000
10452	0008.192000 MHz Crystal	8.192000	P1Q56A20B8M1920
12104	0032.768000 kHz Crystal	0.032760	K1Z6KB09B32k7680
12144	0032.768000 kHz Crystal	0.032760	K1Z6KB09B32k7680
20114	0006.000000 MHz Crystal	6.000000	P1Q56E20T6M0000 (ATP060SM)
20117	0008.000000 MHz Crystal	8.000000	P1Q56E20T8M0000 (ATP08ASM)
20123	0012.000000 MHz Crsyatl	12.000000	P1Q56E20T12M0000 (ATP120SM)
20126	0016.000000 MHz Crystal	16.000000	P1Q56E20T16M0000 (ATP160SM)
20190	0003.686400 MHz Crystal	3.686400	P1Q56E20T3M6864 (ATP037SM)
20191	0004.000000 MHz Crystal	4.000000	P1Q56E20T4M0000 (ATP04ASM)
20192	0004.433619 MHz Crystal	4.433619	P1Q56E20T4M433619 (ATP044SM)
20194	0007.372800 MHz Crystal	7.372800	P1Q56E20T7M3728 (ATP073SM)
20212	0016.000000 MHz Crystal	16.000000	P1Q56E20T16M0000 (ATP16ASM)
20215	0018.432000 MHz Crystal	18.432000	P1Q56E20T18M4320 (ATP18ASM)
20218	0020.000000 MHz Crystal	20.000000	P1Q56E20T20M0000 (ATP20ASM)
20221	0024.000000 MHz Crystal	24.000000	P1Q56E20T24M0000 (ATP240SM)
20224	0025.000000 MHz Crystal	25.000000	P1Q56E20T25M0000 (ATP250SM)
20225	0025.000000 MHz Crystal	25.000000	P1Q56E20T25M0000 (ATP25ASM)
20309	0008.000000 MHz Crystal	8.000000	P1Q56E20T8M0000 (ATP08SM)
20346	0022.118400 MHz Crystal	22.118400	P1Q56E20T22M1184 (ATP22ASM)
20347	0012.288000 MHz Crystal	12.288000	P1Q56E20T12M2880 (ATP122SM)
20372	0004.915200 MHz Crystal	4.915200	P1Q56E20T4M9152 (ATP042SM)
20374	0020.000000 MHz Crystal	20.000000	P1Q56E20T20M0000 (ATP200SM)
20376	0004.433619 MHz Crystal	4.433619	P1Q56E20T4M433619 (ATP044SM)
20377	0020.000000 MHz Crystal	20.000000	P1Q56E20T20M0000 (ATP20ASM)
20378	0020.480000 MHz Crystal	20.480000	P1Q56E20T20M4800 (ATP205SM)
32782	0008.192000 MHz Crystal	8.192000	P1Q56D20T8M1920

CTS Part Number	Description	Frequency (MHz)	CTS Engineering Code (Catalog Part Number)
44003	0032.768000 kHz Crystal	0.032760	K1Z2KF12.5B32k7680
44062	0012.000000 MHz Crystal	12.000000	P1Q55D30T12M0000
44104	0010.000000 MHz Crystal	10.000000	P1Q33D30T10M0000
44124	0003.686400 MHz Crystal	3.686400	P1Q56B20B3M6864
44146	0020.000000 MHz Crystal	20.000000	P1Q55D16T20M0000
44147	0007.680000 MHz Crystal	7.680000	P1Q55D30T7M6800
44152	0016.384000 MHz Crystal	16.384000	P1Q56A20T16M3840
50127	0018.432000 MHz Crystal	18.432000	P1Q56A22B18M432
50222	0022.000000 MHz Crystal	22.000000	P1Q56D00B22M0000
50223	0022.000000 MHz Crystal	22.000000	P1Q56D00T22M0000
50229	0028.000000 MHz Crystal	28.000000	P1Q55A15B28M0000
50237	0020.480000 MHz Crystal	20.480000	P1Qa56A20T20M4800
50255	0016.667000 MHz Crystal	16.667000	P1Q56A20B16M6670
50324	0014.745600 MHz Crystal	14.745600	P1Q55A20B14M7456
50388	0004.194304 MHz Crystal	4.194304	P1Q56A12B4M194304
50428	0020.006666 MHz Crystal	20.006666	P1Q65B16B20M006666
50442	0003.579545 MHz Crystal	3.579545	P1Q56D18B3M579545
50443	0004.096000 MHz Crystal	4.096000	P1Q56D28B4M0960
50444	0020.000000 MHz Crystal	20.000000	P1Q56D20B20M0000
50447	0004.096000 MHz Crystal	4.096000	P1Q56D28T4M0960
50450	0003.579545 MHz Crystal	3.579545	P1Q56D18T3M579545
50451	0020.000000 MHz Crystal	20.000000	P1Q56D20T20M0000
50568	0003.579545 MHz Crystal	3.579545	P1Qa55D16T3M579545
50589	0032.768000 MHz Crystal	32.768000	P3Q55A00B32M7680
50596	0032.768000 kHz Crystal	0.032760	P1Qc2KB12.5B32k7680
50616	0009.216000 MHz Crystal	9.216000	P1Q56A20B9M2160
50624	0025.000000 MHz Crystal	25.000000	P1Q55A18B25M0000
50640	0003.686400 MHz Crystal	3.686400	P1Q66B20T3M6864
50657	0004.194304 MHz Crystal	4.194304	P1Q56A27T4M194304
50658	0018.360000 MHz Crystal	18.360000	P1Q56A27T18M3600
50718	0004.000000 MHz Crystal	4.000000	P1Qa55F20T4M0000
50779	0020.000000 MHz Crystal	20.000000	P1Qa55A00B20M0000
50786	0032.768000 kHz Crystal	0.032760	P1Qc2KB06T32k7680
50834	0011.970000 MHz Crystal	11.970000	P1Q55E20T11M9700
50905	0008.192000 MHz Crystal	8.192000	P1Qa56E20T8M1920
50921	0007.373280 MHz Crystal	7.373280	P1Q35D18T7M3728
50933	0032.768000 kHz Crystal	0.032760	K1Z2KD06B32k7681
50935	0032.768000 kHz Crystal	0.032760	K1Z2KD12.5B32k7680
50936	0032.768000 kHz Crystal	0.032760	K1Za2KD12.5B32k7680
50937	0032.768000 kHz Crystal	0.032760	K1Zb2KD08B32k7680
50945	0008.192000 MHz Crystal	8.192000	P1Qa56E18T8M1920
50596	0032.768000 kHz Crystal	0.032760	P1Qc2KB12.5T32k7680
50786	0032.768000 kHz Crystal T&R	0.032760	P1Qc2KB06T32k7680
50935	0032.768000 kHz Crystal	0.032770	K1Z2KD12.5B32k7680