

## HiResolution® Sound Processing HiRes®-P

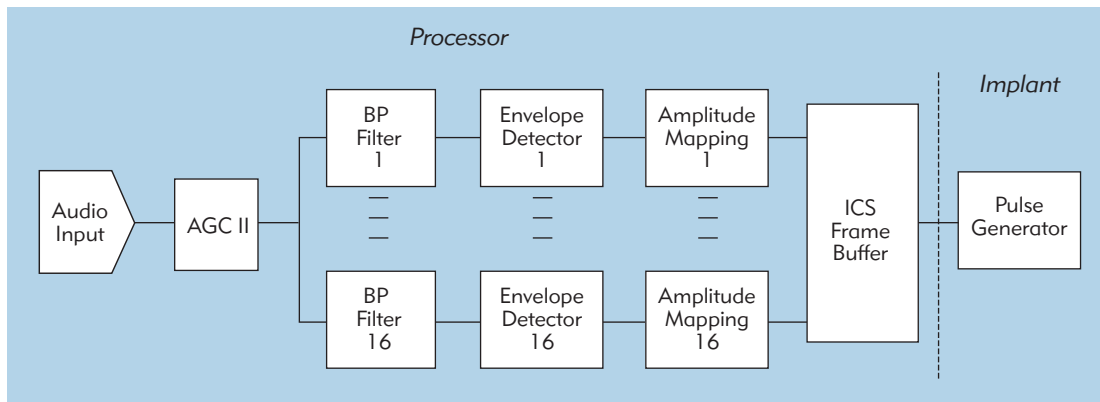
<b>Capture</b>	
Microphone Frequency Range	150 Hz–8000 Hz
Effective Audio Sampling Rate	17.4 kHz
Mapping Input Dynamic Range	20 dB–80 dB programmable (60 dB default)
Pre-Emphasis Filtering	<b>Platinum Series™ Processor &amp; HiRes® Auria® BTE:</b> cascade of highpass Butterworth filters <b>Auria® Harmony™ BTE:</b> second order BiQuad filter
Automatic Gain Control (AGC) (Enabled, default)	Cambridge dual loop AGC (AGC II)

<b>Compose</b>	
Filter Bands	16 maximum
Spectrum Filtering	Sixth order Butterworth bandpass
Acoustic Equalization (Gain)	+/-10 dB (0 dB default)

<b>Detail</b>	
Envelop Extraction	Bin averaging
Rectification	Half wave

<b>Deliver</b>	
Telemetry	1.0 Mbps bandwidth Continuous bi-directional
Output Circuits (Channels)	16 independent current sources to 16 channels
Electrodes	16 maximum programmable
Spectral Bands	16 maximum programmable, logarithmically spaced bands
Spectrum Mapping	Full capture range
Output Current	0 $\mu$ A–2040 $\mu$ A (0.25 $\mu$ A resolution), 0-6000 CU scale
Coupling	Monopolar
Pulse Width	10.7 $\mu$ s–229 $\mu$ s, automatically or manually programmable
Firing Order	Apex to base
Simultaneity	Paired simultaneous (1-9, 2-10, etc)
Rate	5156 pps per channel/82,496 pps total maximum—programmable

## HiResolution Sound Processing HiRes-P



HiRes Signal Processing Path



[www.BionicEar.com](http://www.BionicEar.com)  
[www.BostonScientific.com](http://www.BostonScientific.com)

### Auditory Business

#### Headquarters

Advanced Bionics® Corporation  
Mann Biomedical Park  
25129 Rye Canyon Loop  
Valencia, CA 91355, USA  
(800) 678-2575 in US and Canada  
(661) 362-1400, (661) 362-1500 Fax  
(800) 678-3575 TTY  
[info@advancedbionics.com](mailto:info@advancedbionics.com)

#### Europe

Advanced Bionics® SARL  
76 rue de Battenheim  
68170 Rixheim, France  
+33 (0) 3-89-65-98-00  
+33 (0) 3-89-65-50-05 Fax  
[europe@advancedbionics.com](mailto:europe@advancedbionics.com)

#### Asia-Pacific

Advanced Bionics® Corporation  
Mann Biomedical Park  
25129 Rye Canyon Loop  
Valencia, CA 91355, USA  
(661) 362-1840  
(661) 362-4604 Fax

#### Latin America

Advanced Bionics® Corporation  
Mann Biomedical Park  
25129 Rye Canyon Loop  
Valencia, CA 91355, USA  
(661) 362-1840  
(661) 362-4604 Fax