

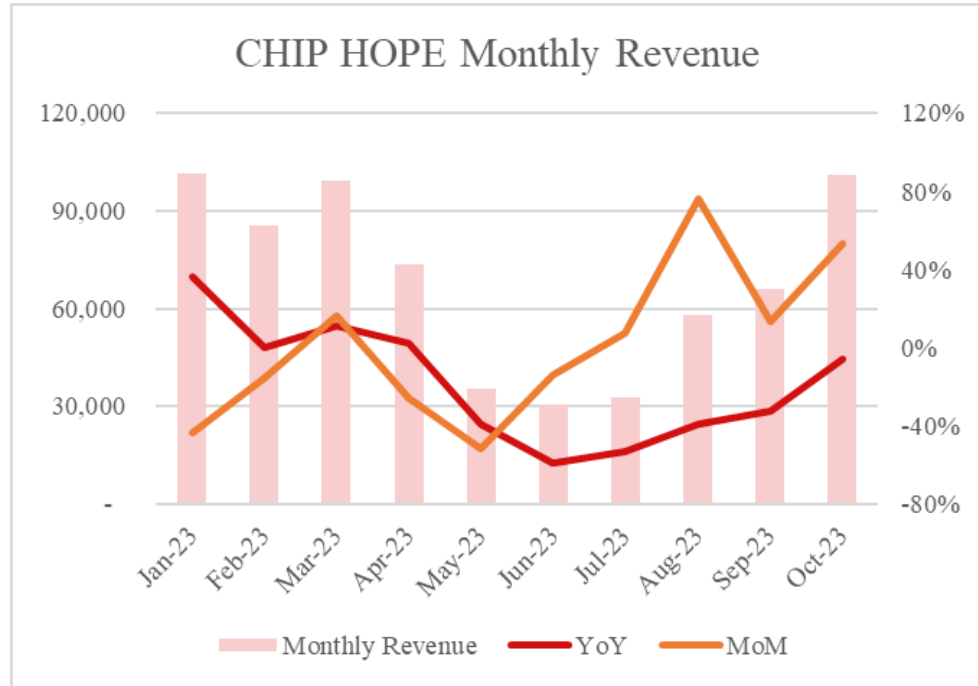


AI everywhere

About Company



Monthly revenue



Balance Sheet

\$TWD mn	3Q23	%	3Q22	%
Cash & equivalents	44	4%	102	8%
Accounts receivable	164	16%	165	13%
Inventories	286	28%	385	29%
PPE	161	16%	154	12%
Total assets	1,038	100%	1,307	100%
Total liabilities	670	65%	923	71%
Total equity	368	35%	384	29%

Income Statement

\$TWD mn	3Q23	3Q22	YoY
Revenue	156	262	-40.27%
Cost of goods sold	103	238	-56.65%
Gross profit	53	24	121.27%
Gross margin	34.10%	9.20%	+24.9ppts
SG&A	76	70	7.73%
Operating profit	-22	-46	51.60%
Non-Operating Income/Loss	4	10	-62.12%
Earnings before tax	-18	-36	48.58%
Income tax	-0	1	-100.13%
Net profit after tax	-18	-36	49.66%
EPS	-0.26	-0.52	50.00%

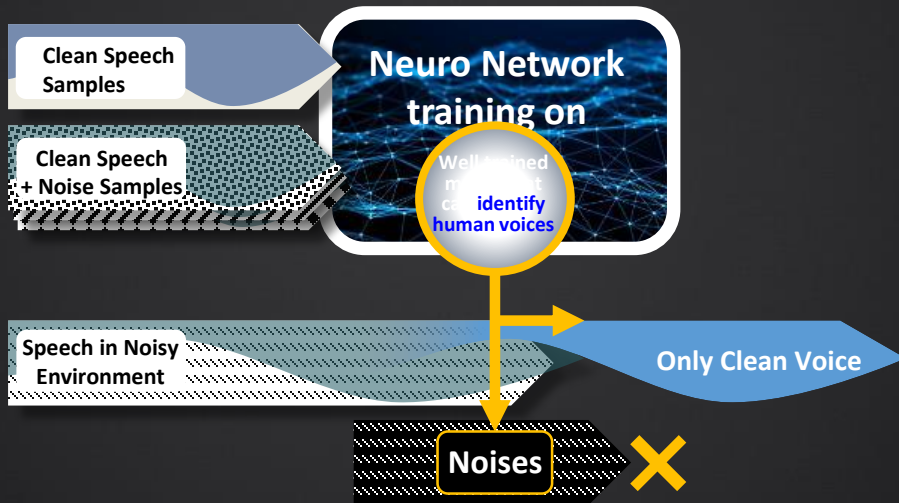
Crystal Clear Microphone Capabilities Thanks To AI

The high-performance AI had learned and set proper elimination of noises to further improve the sound quality. By reducing the environmental noise, clear voice can be delivered to the recipient and vice versa.



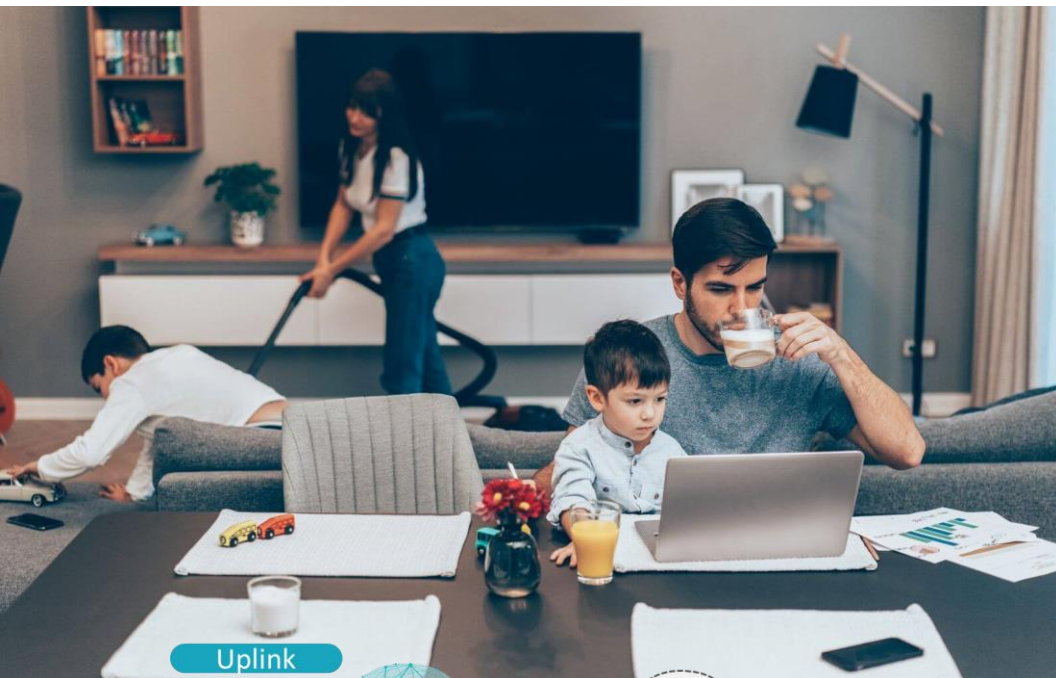
Training Stage

>0.5 billion training samples and increasing...



AIVC™

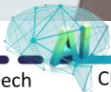
- DNN AI based technology
- Only need 1 microphone
- Fast convergence speed, especially good at dealing non-stationary noise
- Applicable to extremely low SNR conditions ($\leq 0\text{dB}$)
- Support listening noise cancellation



Uplink



Noisy Speech



Clean Speech

Service Provider
or VOIPs



Noise-Free Communication at Anywhere Anytime!



Noise Cancellation

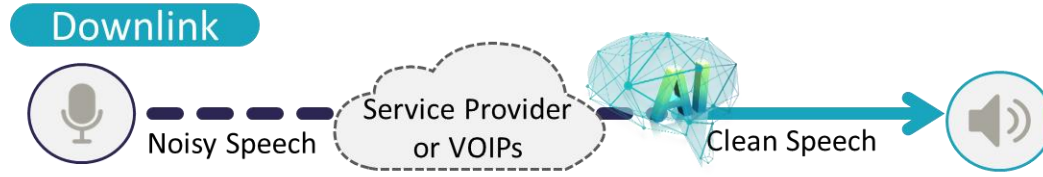


Raw



Output

- Remove all the background noises including non-stationary ones like dog barking, keystroke sounds, or babble noises...etc. in real time. The feature can work on either pre- or post-processes to allow clear voice without artifacts!



Click to Play 



Click to Play 

◆ IntelliGo's AI Echo Cancellation Surpassed Microsoft Teams Echo Performance Test Criteria with Full Duplex Capability

Achieving the good echo suppression could cause other impairments such as distortion or clipping in near end speech or echo leaks when talking turn changes. This test helps to identify the possible echo residuals during and active doubletalk scenarios with alternating talking turns.

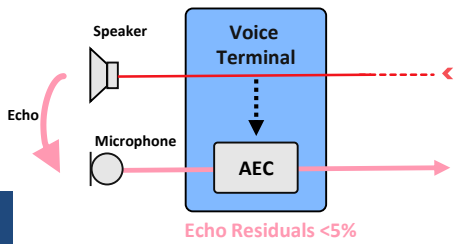
Item	Category	IntelliGo Results	Standard (%)	
			ST Class Segment 1&2	DT class Segment 1&2
4.3.3 Echo Control	F	0%	<5	<5

The ability of a near end user to interrupt the far end user is an important aspect of a voice communication and especially so on meeting room oriented conferencing devices. The test result categorizes the devices by measuring the attenuation of the send signal. This method provide an objective characterization of the DUT performance during double-talk.

Item	Category	IntelliGo Results	Standard	Premium
4.3.4 Send Signal Attenuation during doubletalk	#1	0.4 dB	<15 dB	<12 dB
	#2	1.6 dB	<15 dB	<12 dB



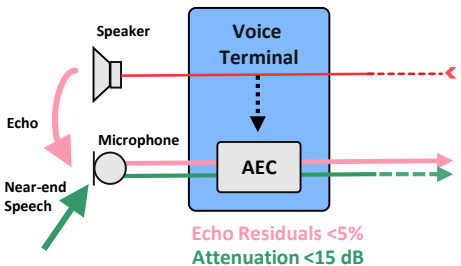
Near-end room



Far-end room



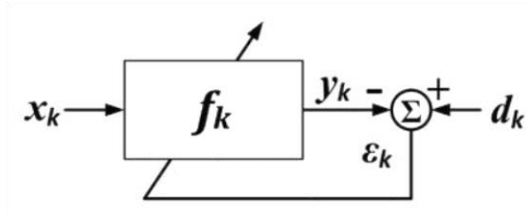
Near-end room



Far-end room

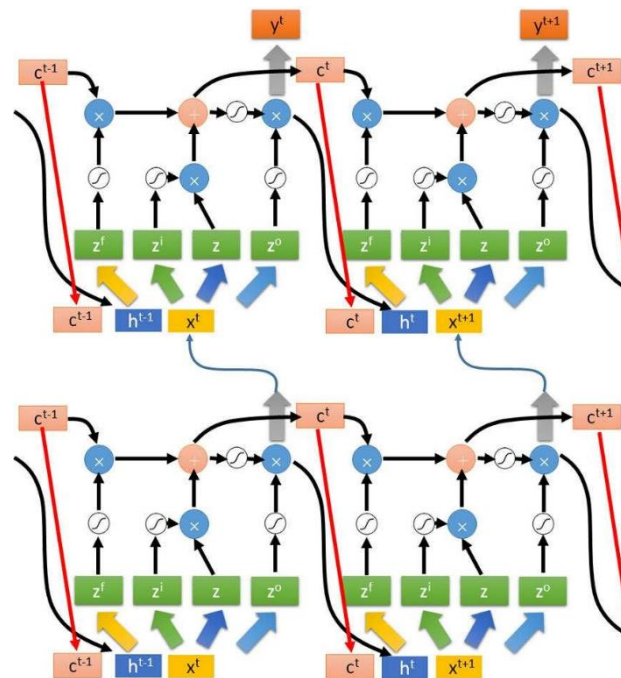
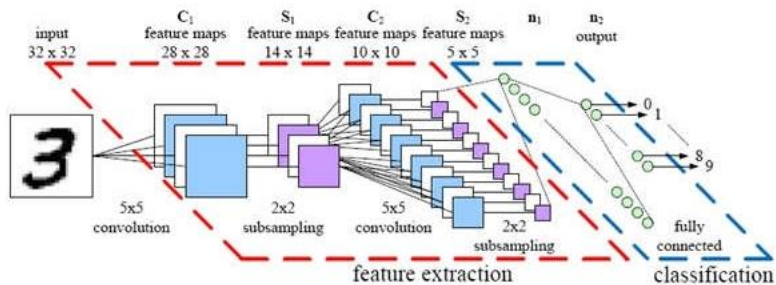
Deep learning sheds some light for image processing, yet remain surprisingly complicated for acoustic processing

Adaptive Filtering (conventional)



VS

VS



	General	Our 巨虹
Frequency channels	12	>48
Binaural wind noise reduction	X	V
Adaptive wind noise reduction	X	V
Auto-situation adaption	X	X
Impulse suppressor	X	V
2 earphone	V	V
Over the counter	X	V
Beamforming	X	V

Core Value

- 1、Deep learning: State-of-the-art Artificial intelligent to handle the annoying noise problem, including the stationary and non-stationary noise. The first to offer DNN (Deep neural network) voice solution
- 2、Support voice wakeup, keyword trigger
- 3、Active noise & echo cancellation
- 4、Clean the voice
- 5、Voice master recognition, Voice master separation
- 6、Supporting vector ALU, zero-skip, same value grouping with Low Frequency/High MIPS

Milestone



CFDA/TFDA

智能語音分離助聽器
(氣導)

智能語音分離助聽器
(骨導)

指向式聲紋增強
(AIVC)

語意交互
(AIVC)

美化音, 警告音
(AIVC)

耳鳴及助眠
(AIVC)

2022/1Q

2022/3Q

2023/1Q

2023/2Q

We are the hear ,we are the here.

Thank You

