

**LAMPIRAN A**  
**HASIL PELATIHAN ANFIS**

*Root Mean Square Error (RMSE)* hasil pelatihan ANFIS dengan epoch 5 adalah sebagai berikut :

Start training ANFIS ...

1	0.00159521
2	0.00159519
3	0.0015952
4	0.0015952
5	0.0015952

Designated epoch number reached --> ANFIS training completed at epoch 5.

*Root Mean Square Error (RMSE)* hasil pelatihan ANFIS dengan epoch 10 adalah sebagai berikut :

Start training ANFIS ...

1	0.00159521
2	0.00159553
3	0.00159539
4	0.00159547
5	0.00159548
6	0.00159547
7	0.00159522
8	0.00159548
9	0.00159526
10	0.00159548

Designated epoch number reached --> ANFIS training completed at epoch 10.

*Root Mean Square Error (RMSE)* hasil pelatihan ANFIS dengan epoch 50 adalah sebagai berikut :

Start training ANFIS ...

1	0.00159521
2	0.00159519
3	0.0015952
4	0.0015952
5	0.0015952
6	0.00159519

Step size decreases to 0.009000 after epoch 6.

7	0.0015952
8	0.00159519

9 0.00159519  
10 0.00159518  
Step size decreases to 0.008100 after epoch 10.  
11 0.00159515  
12 0.00159517  
13 0.00159513  
14 0.00159515  
15 0.0015951  
Step size decreases to 0.007290 after epoch 15.  
16 0.00159512  
17 0.0015951  
18 0.0015952  
19 0.0015951  
Step size decreases to 0.006561 after epoch 19.  
20 0.00159519  
21 0.0015951  
22 0.00159518  
23 0.0015951  
Step size decreases to 0.005905 after epoch 23.  
24 0.00159518  
25 0.00159509  
26 0.00159517  
27 0.00159509  
Step size decreases to 0.005314 after epoch 27.  
28 0.00159517  
29 0.00159508  
30 0.00159517  
31 0.00159508  
Step size decreases to 0.004783 after epoch 31.  
32 0.00159516  
33 0.00159507  
34 0.00159516  
35 0.00159507  
Step size decreases to 0.004305 after epoch 35.  
36 0.00159516  
37 0.00159506  
38 0.00159515  
39 0.00159506  
Step size decreases to 0.003874 after epoch 39.  
40 0.00159514  
41 0.00159506  
42 0.00159513  
43 0.00159505  
Step size decreases to 0.003487 after epoch 43.  
44 0.00159513  
45 0.00159505  
46 0.00159512

47 0.00159504  
Step size decreases to 0.003138 after epoch 47.  
48 0.00159511  
49 0.00159504  
50 0.0015951

Designated epoch number reached --> ANFIS training completed at epoch 50.

*Root Mean Square Error (RMSE)* hasil pelatihan ANFIS dengan epoch 100  
adalah sebagai berikut :

Start training ANFIS ...

1 0.00159521  
2 0.00159519  
3 0.0015952  
4 0.0015952  
5 0.0015952  
6 0.00159519  
Step size decreases to 0.009000 after epoch 6.  
7 0.0015952  
8 0.00159519  
9 0.00159519  
10 0.00159518  
Step size decreases to 0.008100 after epoch 10.  
11 0.00159515  
12 0.00159517  
13 0.00159513  
14 0.00159515  
15 0.0015951  
Step size decreases to 0.007290 after epoch 15.  
16 0.00159512  
17 0.0015951  
18 0.0015952  
19 0.0015951  
Step size decreases to 0.006561 after epoch 19.  
20 0.00159519  
21 0.0015951  
22 0.00159518  
23 0.0015951  
Step size decreases to 0.005905 after epoch 23.  
24 0.00159518  
25 0.00159509  
26 0.00159517  
27 0.00159509  
Step size decreases to 0.005314 after epoch 27.  
28 0.00159517

29 0.00159508  
30 0.00159517  
31 0.00159508  
Step size decreases to 0.004783 after epoch 31.  
32 0.00159516  
33 0.00159507  
34 0.00159516  
35 0.00159507  
Step size decreases to 0.004305 after epoch 35.  
36 0.00159516  
37 0.00159506  
38 0.00159515  
39 0.00159506  
Step size decreases to 0.003874 after epoch 39.  
40 0.00159514  
41 0.00159506  
42 0.00159513  
43 0.00159505  
Step size decreases to 0.003487 after epoch 43.  
44 0.00159513  
45 0.00159505  
46 0.00159512  
47 0.00159504  
Step size decreases to 0.003138 after epoch 47.  
48 0.00159511  
49 0.00159504  
50 0.0015951  
51 0.00159503  
Step size decreases to 0.002824 after epoch 51.  
52 0.00159509  
53 0.00159502  
54 0.00159508  
55 0.00159502  
Step size decreases to 0.002542 after epoch 55.  
56 0.00159507  
57 0.00159501  
58 0.00159505  
59 0.00159501  
Step size decreases to 0.002288 after epoch 59.  
60 0.00159505  
61 0.001595  
62 0.00159504  
63 0.00159499  
Step size decreases to 0.002059 after epoch 63.  
64 0.00159503  
65 0.00159499  
66 0.00159502

67 0.00159499  
Step size decreases to 0.001853 after epoch 67.  
68 0.00159502  
69 0.00159498  
70 0.00159502  
71 0.00159498  
Step size decreases to 0.001668 after epoch 71.  
72 0.00159501  
73 0.00159498  
74 0.00159501  
75 0.00159498  
Step size decreases to 0.001501 after epoch 75.  
76 0.00159501  
77 0.00159497  
78 0.001595  
79 0.00159497  
Step size decreases to 0.001351 after epoch 79.  
80 0.001595  
81 0.00159497  
82 0.00159499  
83 0.00159497  
Step size decreases to 0.001216 after epoch 83.  
84 0.00159499  
85 0.00159497  
86 0.00159499  
87 0.00159497  
Step size decreases to 0.001094 after epoch 87.  
88 0.00159499  
89 0.00159497  
90 0.00159498  
91 0.00159497  
Step size decreases to 0.000985 after epoch 91.  
92 0.00159498  
93 0.00159496  
94 0.00159498  
95 0.00159496  
Step size decreases to 0.000886 after epoch 95.  
96 0.00159498  
97 0.00159496  
98 0.00159497  
99 0.00159496  
Step size decreases to 0.000798 after epoch 99.  
100 0.00159497

Designated epoch number reached --> ANFIS training completed at epoch 100.

**LAMPIRAN B**  
**SPESIFIKASI SOUND CARD SB LIVE 24 BIT**

# General Specifications

## PCI Bus Mastering

- PCI Specification Version 2.1, 2.2 and 2.3 compliant
- Bus mastering reduces latency and speeds up system performance

## Sound Blaster Live! 24-bit Processor

- 64-voice wavetable synthesizer
- Professional quality digital mixing and equalization

## High Quality Audio Path

- Selectable analog sources such as Line In and Microphone In
- Playback of 64 audio channels, each at an arbitrary sample rate
- 24-bit Analog-to-Digital conversion of analog inputs at 96 kHz sample rate
- 24-bit Digital-to-Analog conversion of digital sources at 96 kHz to analog 7.1 speaker output
- 16-bit to 24-bit recording sampling rates: 8, 11.025, 16, 22.05, 24, 32, 44.1, 48 and 96 kHz

## Professional Digital Audio Processing

- Supports Sony/Philips Digital InterFace (SPDIF) format of up to 24-bit/96 kHz quality
- SPDIF input of up to 24-bit/96 kHz quality
- SPDIF output at selectable sampling rate of 48 or 96 kHz
- Software switching of SPDIF Input-to-Output (bypass) to minimize cable connection hassle

### Note

- SPDIF input and output requires Digital I/O Module.
- SPDIF output not available during playback of protected digital audio contents authored with DRM (Digital Rights Management) technology.

## Flexible Mixer Control

- Software playback control of CD Audio, Line In, Microphone In and Wave/DirectSound device
- Software recording control of selectable input of various audio sources for recording CD Audio and Line In, Microphone In and Wave/DirectSound device
- Adjustable master volume control

- Separate bass and treble control
- Front and rear balance control
- Muting and panning control for selectable sources

### **Creative Multi Speaker Surround (CMSS)**

- Multispeaker technology
- Upmixes mono or stereo sources to 7.1 channels
- Professional-quality panning algorithm

**LAMPIRAN C**  
**SPEKIFIKASI SOUND CARD SOUND MAX**