1.0.0.0 Ai Tweaker

```
###########################################################################
Ai Overclock Tuner (Ai-Übertaktungstuner)...............................[Manuell]
BCLK Frequency (BCLK-Frequenz)..........................................[100.2480]
ASUS Multicore Enhancement (ASUS Multicore-Erweiterung).................[Enabled – Remove All limits]
SVID Behavior...........................................................[Best-Case Scenario]
CPU-Bus-Geschwindigkeit: DRAM-Geschwindigkeits-Ratio-Modus..............[100:133]
Memory Controller : DRAM Frequency Ratio................................[1:1]
Speicherfrequenz........................................................[DDR4-4141MHz]
Performance Core Ratio..................................................[By Core Usage]
1-Core Ratio Limit......................................................[54]
2-Core Ratio Limit......................................................[54]
3-Core Ratio Limit......................................................[53]
4-Core Ratio Limit......................................................[53]
5-Core Ratio Limit......................................................[52]
6-Core Ratio Limit......................................................[52]
7-Core Ratio Limit......................................................[52]
8-Core Ratio Limit......................................................[52]
> Specific Performence Core.............................................[ > ]
Efficient Core Ratio....................................................[Sync All Cores]
ALL-Core Ratio Limit....................................................[41]
> Specific Efficient Core...............................................[ > ]
CPU SVID Support (CPU-SVID-Unterstützung)...............................[Aktiviert]
> AVX Related Controls..................................................[ > ]
> DRAM-Timing-Steuerung.................................................[ > ]
> DIGI+ VRM.............................................................[ > ]
> Auto Coltage Caps.....................................................[ > ]
> Internal CPU Power Management (Interne CPU-Energieverealtung)..........[ > ]
> Thermal Velocity Boost................................................[ > ]
> V/F Point Offset......................................................[ > ]
> Tweaker's Paradise....................................................[ > ]
> AI Features...........................................................[ > ]
Ring Down Bin...........................................................[Auto]
Min CPU Cache Ratio (Minimales CPU-Cache-Verhältnis)....................[Auto]
Max. CPU Cache Ratio....................................................[44]
BCLK Aware Adaptive Voltage.............................................[Enabled]
CPU Core/Cache Voltage..................................................[Manual Mode]
- CPU-Kernspannungsübergehung...........................................[1.35000]
CPU L2 Voltage..........................................................[Auto]
CPU System Agent-Spannung...............................................[Manual Mode]
- CPU System Agent Voltage Override.....................................[1.35000]
CPU Input Voltage.......................................................[1.90000]
DRAM Voltage............................................................[1.50000]
IVR Transmitter VDDQ Voltage............................................[1.50000]
 > DRAM REF Voltage Control.............................................[ > ]
```

1.1.0.0 Specific Performance Core
##
```
Performance Core0 Specific Ratio Limit...................................[53]
Performance Core0 specific Adaptive Voltage..............................[Auto]
Performance Core1 Specific Ratio Limit...................................[53]
Performance Core1 specific Adaptive Voltage..............................[Auto]
Performance Core2 Specific Ratio Limit...................................[53]
Performance Core2 specific Adaptive Voltage..............................[Auto]
Performance Core3 Specific Ratio Limit...................................[53]
Performance Core3 specific Adaptive Voltage..............................[Auto]
*Performance Core4 Specific Ratio Limit..................................[55]
Performance Core4 specific Adaptive Voltage..............................[Auto]
*Performance Core5 Specific Ratio Limit..................................[55]
Performance Core5 specific Adaptive Voltage..............................[Auto]
Performance Core6 Specific Ratio Limit...................................[53]
Performance Core6 specific Adaptive Voltage..............................[Auto]
Performance Core7 Specific Ratio Limit...................................[53]
Performance Core7 specific Adaptive Voltage..............................[Auto]
```

1.2.0.0 Specific Efficient Core
##
```
Efficient Core Group0 Specific Ratio Limit..............................[Auto]
Efficient Core Group0 specific Adaptive Voltage.........................[Auto]
Efficient Core Group1 Specific Ratio Limit..............................[Auto]
Efficient Core Group1 specific Adaptive Voltage.........................[Auto]
```

1.3.0.0 AVX Related Controls
##
```
AVX2....................................................................[Auto]
AVX512..................................................................[Auto]
AVX2 Ratio Offset to per-core Ratio Limit...............................[Auto]
AVX2 Voltage Guardband Scale Factor.....................................[Auto]
```

1.4.0.0 DRAM-Timing-Steuerung
##
```
DRAM CAS#-Verzögerungszeit..............................................[16]
DRAM RAS# zu CAS#-Verzögerung...........................................[16]
DRAM RAS# PRE-Zeit......................................................[16]
DRAM RAS# ACT-Zeit......................................................[28]
DRAM Command Rate.......................................................[2N]
DRAM RAS# to RAS# Delay L...............................................[6]
DRAM RAS# to RAS# Delay S...............................................[4]
DRAM REF-Umlaufzeit.....................................................[280]
DRAM REF Cycle Time 2...................................................[Auto]
DRAM REF Cycle Time 4...................................................[Auto]
DRAM Refresh Interval...................................................[65535]
DRAM-SCHREIB-Aktualisierungszeit........................................[14]
DRAM READ zu PRE-Zeit...................................................[6]
DRAM FOUR ACT WIN-Zeit..................................................[16]
DRAM SCHREIBEN- zu LESEN-Verzögerung....................................[Auto]
DRAM WRITE to READ Delay L..............................................[Auto]
```

```
      DRAM WRITE to READ Delay S............................................[Auto]
      DRAM CAS to CAS Delay L..............................................[Auto]
      DRAM CKE Minimum Pulse Width.........................................[6]
      DRAM Write Latency...................................................[16]
 >  Skew Control............................................................[ > ]
 >  RTL IOL Control.........................................................[ > ]
 >  Memory Training Algorithms..............................................[ > ]
      tRDRD_sg_Training....................................................[7]
      tRDRD_sg_Runtime.....................................................[7]
      tRDRD_dg_Training....................................................[4]
      tRDRD_dg_Runtime.....................................................[4]
      tRDWR_sg.............................................................[11]
      tRDWR_dg.............................................................[11]
      tWRWR_sg.............................................................[7]
      tWRWR_dg.............................................................[4]
      tWRRD_sg.............................................................[29]
      tWRRD_dg.............................................................[24]
      tRDRD_dr.............................................................[7]
      tRDRD_dd.............................................................[7]
      tRDWR_dr.............................................................[11]
      tRDWR_dd.............................................................[11]
      tWRWR_dr.............................................................[7]
      tWRWR_dd.............................................................[7]
      tWRRD_dr.............................................................[6]
      tWRRD_dd.............................................................[6]
      tWRPRE...............................................................[32]
      tPRPDEN..............................................................[Auto]
      tRDPDEN..............................................................[Auto]
      tWRPDEN..............................................................[Auto]
      tCPDED...............................................................[Auto]
      tREFIX9..............................................................[Auto]
      Ref Interval.........................................................[Auto]
      tXPDLL...............................................................[Auto]
      tXP..................................................................[Auto]
      tPPD.................................................................[Auto]
      tCCD_L_tDLLK.........................................................[Auto]
      MRC-Systemschnellstart...............................................[Disabled]
      MCH Full Check.......................................................[Auto]
      Mem Over Clock Fail Count............................................[Auto]
      Training Profile.....................................................[Auto]
      RxDfe................................................................[Auto]
      Mrc Training Loop Count..............................................[Auto]
      DRAM CLK Period......................................................[Auto]
      Controller 0, Channel 0 Control......................................[Enabled]
      Controller 0, Channel 1 Control......................................[Enabled]
      Controller 1, Channel 0 Control......................................[Enabled]
      Controller 1, Channel 1 Control......................................[Enabled]
      MC_Vref0.............................................................[Auto]
      MC_Vref1.............................................................[Auto]
      MC_Vref2.............................................................[Auto]
 >  Configure Memory Dynamic Frequency Switching............................[ > ]
```

1.4.1.0 Skew Control
```
##########################################################################
```
> DDRCRCOMPCTL0/1/2...[>]
ODT RTT WR (CHA)..[Auto]
ODT RTT PARK (CHA)..[Auto]
ODT RTT NOM (CHA)...[Auto]
ODT RTT WR (CHB)..[Auto]
ODT RTT PARK (CHB)..[Auto]
ODT RTT NOM (CHB)...[Auto]
ODT_READ_DURATION...[Auto]
ODT_READ_DELAY..[Auto]
ODT_WRITE_DURATION..[Auto]
ODT_WRITE_DELAY...[Auto]

1.4.1.1 DDRCRCOMPCTL0/1/2
```
##########################################################################
```
Ctl0 dqvrefup...[Auto]
Ctl0 dqvrefdn...[Auto]
Ctl0 dqodtvrefup..[Auto]
Ctl0 dqodtvrefdn..[Auto]
Ctl1 cmdvrefup..[Auto]
Ctl1 ctlvrefup..[Auto]
Ctl1 clkvrefup..[Auto]
Ctl1 ckecsvrefup..[Auto]
Ctl2 cmdvrefdn..[Auto]
Ctl2 ctlvrefdn..[Auto]
Ctl2 clkvrefdn..[Auto]

1.4.2.0 RTL IOL Control
```
##########################################################################
```
Round Trip Latency Init Value MC0 CHA.........................[Auto]
Round Trip Latency Max Value MC0 CHA..........................[Auto]
Round Trip Latency Offset Value Mode Sign MC0 CHA.............[-]
Round Trip Latency Offset Value MC0 CHA.......................[Auto]
Round Trip Latency Init Value MC1 CHA.........................[Auto]
Round Trip Latency Max Value MC1 CHA..........................[Auto]
Round Trip Latency Offset Value Mode Sign MC1 CHA.............[-]
Round Trip Latency Offset Value MC1 CHA.......................[Auto]
Round Trip Latency MC0 CHA R0.................................[73]
Round Trip Latency MC0 CHA R1.................................[25]
Round Trip Latency MC0 CHA R2.................................[73]
Round Trip Latency MC0 CHA R3.................................[73]
Round Trip Latency MC0 CHA R4.................................[25]
Round Trip Latency MC0 CHA R5.................................[25]
Round Trip Latency MC0 CHA R6.................................[25]
Round Trip Latency MC0 CHA R7.................................[25]
Round Trip Latency MC1 CHA R0.................................[75]
Round Trip Latency MC1 CHA R1.................................[25]
Round Trip Latency MC1 CHA R2.................................[75]
Round Trip Latency MC1 CHA R3.................................[75]
Round Trip Latency MC1 CHA R4.................................[25]
Round Trip Latency MC1 CHA R5.................................[25]
Round Trip Latency MC1 CHA R6.................................[25]
Round Trip Latency MC1 CHA R7.................................[25]

1.4.3.0 Memory Training Algorithms
##
```
Early Command Training................................................[Auto]
SenseAmp Offset Training..............................................[Auto]
Early ReadMPR Timing Centering 2D.....................................[Auto]
Read MPR Training.....................................................[Auto]
Receive Enable Training...............................................[Auto]
Jedec Write Leveling..................................................[Auto]
Early Write Time Centering 2D.........................................[Auto]
Early Read Time Centering 2D..........................................[Auto]
Write Timing Centering 1D.............................................[Auto]
Write Voltage Centering 1D............................................[Auto]
Read Timing Centering 1D..............................................[Auto]
Dimm ODT Training*....................................................[Auto]
Max RTT_WR.........................................................[ODT Off]
DIMM RON Training*....................................................[Auto]
Write Drive Strength/Equalization 2D*.................................[Auto]
Write Slew Rate Training*.............................................[Auto]
Read ODT Training*....................................................[Auto]
Comp Optimization Training............................................[Auto]
Read Equalization Training*...........................................[Auto]
Read Amplifier Training*..............................................[Auto]
Write Timing Centering 2D.............................................[Auto]
Read Timing Centering 2D..............................................[Auto]
Command Voltage Centering.............................................[Auto]
Early Command Voltage Centering.......................................[Auto]
Write Voltage Centering 2D............................................[Auto]
Read Voltage Centering 2D.............................................[Auto]
Late Command Training.................................................[Auto]
Round Trip Latency.................................................[Enabled]
Turn Around Timing Training...........................................[Auto]
CMD CTL CLK Slew Rate.................................................[Auto]
CMD/CTL DS & E 2D.....................................................[Auto]
Read Voltage Centering 1D.............................................[Auto]
TxDqTCO Comp Training*................................................[Auto]
ClkTCO Comp Training*.................................................[Auto]
TxDqsTCO Comp Training*...............................................[Auto]
VccDLL Bypass Training................................................[Auto]
CMD/CTL Drive Strength Up/Dn 2D.......................................[Auto]
DIMM CA ODT Training..................................................[Auto]
PanicVttDnLp Training*................................................[Auto]
Read Vref Decap Training*.............................................[Auto]
Vddq Training.........................................................[Auto]
Duty Cycle Correction Training........................................[Auto]
Rank Margin Tool Per Bit..............................................[Auto]
DIMM DFE Training.....................................................[Auto]
Tx Dqs Dcc Training...................................................[Auto]
Rank Margin Tool......................................................[Auto]
Memory Test...........................................................[Auto]
DIMM SPD Alias Test...................................................[Auto]
Receive Enable Centering 1D...........................................[Auto]
Retrain Margin Check..................................................[Auto]
Write Drive Strength Up/Dn independently..............................[Auto]
Margin Check Limit................................................[Disabled]
```

1.4.4.0 Configure Memory Dynamic Frequency Switching
##
```
Dynamic Memory Boost.......................................[Disabled]
Realtime Memory Frequency..................................[Disabled]
SA GV......................................................[Disabled]
```

1.5.0.0 DIGI+ VRM
##
```
VRM Initialization Check (VRM-Initialisierungsprüfung)..............[Deaktiviert]
CPU Input Voltage Load-line Calibration................................[Auto]
CPU Load-Line Calibration (CPU-Belastungslinie-Kalibrierung)............[Level 5]
Synch ACDC Loadline with VRM Loadline..................................[Deaktiviert]
CPU Current Capability (CPU-Stromfähigkeit)............................[170%]
CPU VRM Switching Frequency (CPU-VRM-Schaltfrequenz)...................[Auto]
VRM Spread Spectrum (VRM-Streuspektrum)................................[Auto]
CPU Power Duty Control (CPU-Leistungszyklusregelung)...................[Extreme]
CPU Power Phase Control (CPU-Leistungsphasensteuerung).................[Extrem]
CPU Core/Cache Boot Voltage............................................[Auto]
CPU Input Boot Voltage.................................................[Auto]
PLL Termination Boot Voltage...........................................[Auto]
CPU Standby Boot Voltage...............................................[Auto]
Memory Controller Boot Voltage.........................................[Auto]
```

1.6.0.0 Auto Coltage Caps
##
```
CPU Core Auto Voltage Cap..............................................[Auto]
CPU Input Auto Voltage Cap.............................................[Auto]
```

1.7.0.0 Internal CPU Power Management (Interne CPU-Energieverealtung)
##
```
Maximum CPU Core Temperature...........................................[Auto]
Package Temperature Threshold..........................................[Auto]
Regulate Frequency by above Threshold..................................[Auto]
IVR Transmitter VDDQ ICCMAX............................................[Auto]
Unlimited ICCMAX.......................................................[Auto]
CPU Core/Cache Current Limit Max. (CPU-Kern-/Cache-Stromgrenze max.)....[511.75]
Long Duration Package Power Limit (Langzeit-Paket-Leistungslimit).......[4095]
Package Power Time Window (Paket-Leistungszeitfenster).................[Auto]
Short Duration Package Power Limit (Kurzzeit-Paket-Leistungslimit)......[4095]
IA AC Load Line........................................................[0.01]
IA DC Load Line........................................................[0.01]
IA CEP Enable..........................................................[Auto]
SA CEP Enable..........................................................[Auto]
IA SoC Iccmax Reactive Protector.......................................[Auto]
Inverse Temperature Dependency Throttle................................[Auto]
IA VR Voltage Limit....................................................[Auto]
```

1.8.0.0 Thermal Velocity Boost
##
```
TVB Voltage Optimizations..............................................[Auto]
V-Max Stress...........................................................[Auto]
Overclocking TVB.......................................................[+1Boost Profile]
```

1.9.0.0 V/F Point Offset
##
```
Offset Mode Sign 1.................................................[+]
V/F Point 1 Offset.................................................[Auto]
Offset Mode Sign 2.................................................[+]
V/F Point 2 Offset.................................................[Auto]
Offset Mode Sign 3.................................................[+]
V/F Point 3 Offset.................................................[Auto]
Offset Mode Sign 4.................................................[+]
V/F Point 4 Offset.................................................[Auto]
Offset Mode Sign 5.................................................[+]
V/F Point 5 Offset.................................................[Auto]
Offset Mode Sign 6.................................................[+]
V/F Point 6 Offset.................................................[Auto]
Offset Mode Sign 7.................................................[+]
V/F Point 7 Offset.................................................[Auto]
Offset Mode Sign 8.................................................[+]
V/F Point 8 Offset.................................................[Auto]
Offset Mode Sign 9.................................................[+]
V/F Point 9 Offset.................................................[Auto]
Offset Mode Sign 10................................................[+]
V/F Point 10 Offset................................................[Auto]
Offset Mode Sign 11................................................[+]
V/F Point 11 Offset................................................[Auto]
```

1.10.0.0 Tweaker's Paradise
##
```
Realtime Memory Timing.............................................[Disabled]
SPD Write Disable..................................................[TRUE]
PVD Ratio Threshold................................................[Auto]
Banding Ratio......................................................[Auto]
SA PLL Frequency Override..........................................[Auto]
BCLK TSC HW Fixup..................................................[Enabled]
Core Ratio Extension Mode..........................................[Disabled]
FLL OC mode........................................................[Auto]
Core PLL Voltage...................................................[Auto]
GT PLL Voltage.....................................................[Auto]
Ring PLL Voltage...................................................[Auto]
System Agent PLL Voltage...........................................[Auto]
Memory Controller PLL Voltage......................................[Auto]
CPU 1.8V Small Rail................................................[Auto]
PLL Termination Voltage............................................[Auto]
CPU Standby-Spannung...............................................[Auto]
PCH 1.05V Voltage..................................................[Auto]
PCH 0.82V Voltage..................................................[Auto]
CPU Input Voltage Reset Voltage....................................[Auto]
```

1.11.0.0 AI Features
##
```
Package Temperature Threshold......................................[Auto]
Regulate Frequency by above Threshold..............................[Auto]
Cooler Efficiency Customize........................................[Keep Training]
Cooler Re-evaluation Algorithm.....................................[Normal]
Optimism Scale.....................................................[100]
```

1.12.0.0 DRAM REF Voltage Control
```
################################################################################
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL0...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL1...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL2...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL3...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL4...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL5...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL6...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank0 BL7...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL0...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL1...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL2...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL3...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL4...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL5...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL6...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM0 Rank1 BL7...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL0...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL1...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL2...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL3...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL4...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL5...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL6...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank0 BL7...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL0...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL1...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL2...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL3...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL4...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL5...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL6...........................[Auto]
DRAM DATA REF Voltage on CHA DIMM1 Rank1 BL7...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL0...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL1...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL2...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL3...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL4...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL5...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL6...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank0 BL7...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL0...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL1...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL2...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL3...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL4...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL5...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL6...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM0 Rank1 BL7...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL0...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL1...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL2...........................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL3...........................[Auto]
```

```
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL4............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL5............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL6............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank0 BL7............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL0............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL1............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL2............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL3............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL4............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL5............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL6............................[Auto]
DRAM DATA REF Voltage on CHB DIMM1 Rank1 BL7............................[Auto]
```