

Evolution of the board  
A statement of the  
Intrinsic Harwar Evolution

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# Abstract

x

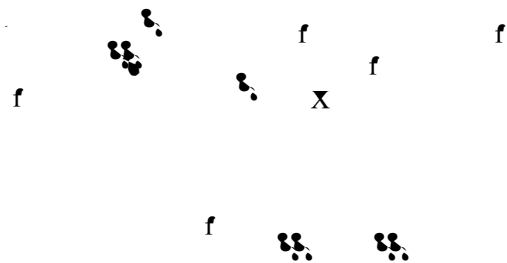
f

*phenotype*

*fitness function*

X

## 2.2 Choice of EA



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### **3 Target domains for EHW**

#### ***3.1 EHW versus conventional design techniques***

x



X

X



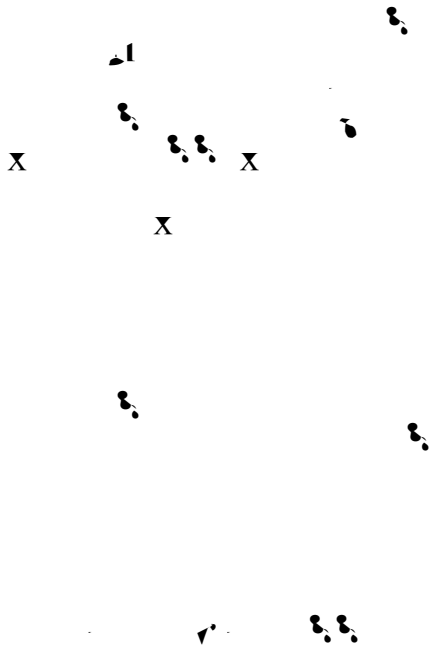
X

x

31

### **3.5 Complex behaviour**

DC current gain



4. ortab ty o ntrns ra y vo v<sub>T</sub>  
 r r u t s







## **5 The Evolvable Motherboard - A testbed for hardware evolution**

### ***5.1 Surmounting obstacles in unconstrained intrinsic EHW***

4D a n wt

6

## 6 Experimentation and results

X

X

### 6.1 An intrinsically evolved NOT Gate

X

X

f f X f  
i i XXX -1 XX 1 X

### 6.2 The experimental set-up

X

P

P

P P

X





## ***6.5 Evolving a NOT gate from scratch***





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*Artificial Life II*



*Adaptation in Natural  
and Artificial Systems*



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